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THOSE WHO TRANSFER--A STUDY OF THE ACHIEVEMENT OF GENERAL COLLEGE STUDENTS WHO TRANSFERRED TO OTHER COLLEGES OF THE UNIVERSITY OF MINNESOTA, 1951-1956.

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MINNESOTA UNIV., MINNEAPOLIS, GENERAL COLLEGE

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DESCRIPTORS- *JUNIOR COLLEGES, *TRANSFER STUDENTS, *FOLLOWUP STUDIES, *PERFORMANCE FACTORS, *COLLEGE STUDENTS, HIGHER EDUCATION, GENERAL EDUCATION, ACADEMIC PERFORMANCE, STUDENT CHARACTERISTICS,

THE GENERAL COLLEGE WAS ESTABLISHED FOR HIGH SCHOOL GRADUATES UNABLE TO QUALIFY FOR A BACHELOR'S DEGREE OR TO COMPETE IN THE UNIVERSITY'S 4-YEAR COLLEGES. FOR THE FIRST GROUP, THERE IS A BROAD, TERMINAL, UNSPECIALIZED EDUCATION, AND, FOR THE SECOND, THE SAME PROGRAM PLUS COUNSELING IN PREPARATION FOR TRANSFER. BOTH CONTENT AND METHOD OF INSTRUCTION ARE STUDENT-CENTERED, AS IS THIS STUDY. IT EXAMINES THE STUDENTS' PERFORMANCE AFTER TRANSFER, THE NUMBER EARNING PROFESSIONAL, 4-YEAR, OR HIGHER DEGREES, QUALITIES (BY PREDICTION OR PERFORMANCE) THAT HELP OR HINDER THEM THE MOST, AND THE KIND OF COLLEGE AND CAREER THEY SELECT. THIS INFORMATION, WITH CORRELATIONS, IS GIVEN IN TABLES AND TEXT. AMONG THE CONCLUSIONS ARE (1) OVER HALF OF THE STUDENTS WERE FROM PUBLIC HIGH SCHOOLS IN THE METROPOLITAN AREA, (2) AS ABILITY SCORES SHOW BUT A SMALL PART OF THE STUDENTS' TALENTS, THE COUNSELOR MUST EXAMINE OTHER ATTRIBUTES AS WELL, (3) THE FACTOR WITH THE BEST PREDICTIVE VALUE IS GENERAL COLLEGE PERFORMANCE BEFORE TRANSFER, (4) THE PERCENTILE AVERAGE OF 65, PRESENTLY REQUIRED FOR QUALIFICATION, IS BOTH USEFUL AND EFFECTIVE, (5) WITHDRAWALS ARE CAUSED BY OTHER FACTORS THAN POOR GRADES, (6) TRANSFERS EARNING 4-YEAR DEGREES DID SO IN 12 TO 15 QUARTERS, AND (7) GRANTING A DIFFERENCE IN APTITUDE, THE NUMBER OF TRANSFERS WHO GRADUATE COMPARES WELL WITH THOSE WHO START AT THE UNIVERSITY. STUDIES USING DATA COLLECTED INCIDENTALLY WITH THIS ONE ARE PLANNED. (HH)

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1951 - 1956

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F. Faith Finnberg

General College
University of Minnesota
1960

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U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
OFFICE OF EDUCATION

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UNIVERSITY OF CALIF.
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INFORMATION

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PREFACE

For two years now, innumerable generous persons have lent not only their ears, but their hands; not only their sympathy, but their understanding and skill to the planning and execution of this study. Without the coöperation and the interest of many individuals in the great university family, the groundwork could not have been laid nor the data collected, organized, and analyzed.

To each of the following members of the General College faculty and administration as well as to many others who listened to and answered the countless miscellaneous, but important questions that cropped up during the past months, I owe special thanks:

To the Executive Council for moral support and administrative backing and also for allocation of funds, always hard to come by, without which the research could not have gone on.

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Still others, not in the General College itself, but in the university at large, showed true enthusiasm for this project and willingness to give unstintingly of their time and energy in its behalf. Among them are True E. Pettengill, Recorder for the university, who opened the files of the Office of Admissions and Records and who shared the results of his own research to enrich the background for this study, and Alma M. DeVaughn and Loretta C. Cannon, both principal clerks in the Office of Admissions and Records, without whose help the many hundreds of official transcripts would not have been made available. Invaluable aid came from three other persons: Lois E. Erickson, Senior Tabulating Supervisor in the Numerical Analysis Center, who oversaw the transfer of data to IBM cards and also explained some of the mysteries of sorters and computers for my enlightenment; Charles Gates, Director of the Agricultural Experimental Station, who allowed the statisticians full use of the tabulator and sorter in his office; and Earl N. Ringo, Assistant to the Director of the Bureau of Institutional Research, who furnished important leads to other studies and to books which proved useful for comparison of various data and findings.

Finally, my appreciation is due in large measure to Mary Ellen Kirchner, Teaching Assistant in the Division of Literature, Writing, Speech, and Philosophy of the General College, who has faithfully and painstakingly typed and proofread the manuscript and prepared it for the mimeographers. Without her, this document would not be in your hands!

May, 1960 F. Faith Finnberg

THOSE WHO TRANSFER: A STUDY OF THE ACHIEVEMENT OF GENERAL COLLEGE STUDENTS WHO TRANSFERRED TO OTHER COLLEGES OF THE UNIVERSITY OF MINNESOTA,

1951 - 1956

I. HISTORY

In 1932, under the leadership of President Lotus Delta Coffman, the Board of Regents of the University of Minnesota created a new college within the university, a college unique at that time and even today. Their action was prompted by concern for a significant segment of the student population of this publicly supported institution which traditionally admits any resident of the state who is a graduate of an accredited high school: those who were unable to qualify for a baccalaureate degree and those who were unprepared to compete successfully in the rigorous curricula offered to lower classmen by the various four-year colleges of the university.[1] For the first group, the new General College was designed to give a broad program of general education, unspecialized and admittedly terminal, offering a two-year Associate in Arts degree to those who completed ninety credits and passed a comprehensive examination. For the second group, the college was to present not only its program of general education, but also a chance to begin their university careers with opportunity for considerable individual counseling and personal instruction, with the idea that they might then be able to go on creditably to further study and even to four-year degrees in the other colleges of the university for which they had originally been unprepared.

Implicit in the plan for the General College from the very beginning was interest in the student himself. The very motivation of President Coffman and the regents suggests this fact, as do numerous other manifestations in the early as well as in subsequent years. For example, every member of the faculty and of the administration has a number of advisees (perhaps from thirty to forty) whom he helps with registration, whose long-range planning he oversees, for whom he explains the workings of the university, and to whose several and varied problems he often listens. Moreover, each faculty adviser has access to and ordinarily uses extensively both the students' permanent folders and the expert consultation available in the offices of trained counselors in the main office of the college. In addition to his duties as an adviser, the faculty member serves on divisional as well as college committees, where principal emphasis rests upon the needs of the student and where participants seek the wisest means of answering those needs. Such committees may engage in curriculum evaluations and course planning, always concerned primarily with creating a program conforming to the general education aims of the college and serving the student as a human being in the university community and in the society where he will eventually live; often the term "student-centered" is employed, reflecting the common endeavor to focus the courses, both content and method, upon the student himself. Or such committees may be involved with investigation into aspects of the college other than curricular: its comprehensive examination, its grading system, requirements for the Associate in Arts degree or for transfer to another college of the university, relationships with those other colleges and with the university as a whole, and the General College student as a person. Frequently, on their own initiative, but customarily with the financial and/or moral backing of the college administration and Executive Council, individuals embark upon research projects of their own, aiming to contribute something additional or something new, perhaps about the educational value or success of courses which they themselves teach or about the General College student and his aspirations or his progress.

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[1] "All residents of the state who are graduates of accredited high schools are admitted to the university because it is a state institution. Yet many of the separate colleges within the university impose additional and slightly more stringent entrance requirements. These are set in terms of measured academic ability, level of high school scholarship, pattern of high school courses, or some combination of the three. Because the General College uses no such additional entrance requirements, all students automatically excluded from other colleges are told that they may register in the General College if they so desire. Rather than not enter the university at all many of them accept this alternative, but in the hope that they will soon be able to transfer to the college of their choice. One of the specific purposes of the General College is to serve this group of students, who in the past had been admitted to the professional and pre-professional curriculums of the other colleges and then quite promptly dropped for low scholarship...." From Cornelia T. Williams, _These We Teach, A Study of General College Students_, pp. 51-52.

This study falls into the last-named category, exploring an area about the student which has heretofore remained relatively unexamined. Previous investigations have indeed revealed a good deal of specific information: that the General College student is a young man (three-fourths of the population is male) or a young woman of the upper middle class;[2] that his IQ on the average is about 107,[3] somewhat lower than that of the average college student, but somewhat above that of the total population; that, though he does possess some personal problems, he is socially well adjusted;[4] that neither his high school performance[5] nor his scores on the American Council on Education Psychological Examination[6] and the Coöperative English Test[7] predict academic success for him, at least in ordinary terms; that he frequently sees himself and his future unrealistically with regard both to his measured interests and to his abilities; that he generally feels frustrated at being in the General College (only a bare one-fifth are voluntary matriculants, i.e., possessing a CAR[8] [average of HSR[9] and score on ACE] of 40 %ile or higher) and wants mainly to "get out" (i.e., to transfer). All this information we possess, and its sum may indeed be considerably greater than the information which many colleges have about their students. Moreover, this description of the General College student is as reliable now as when it was drawn in 1943.[10]

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[2] Ibid., p. 47.

[3] Ibid., p. 46.

[4] Ibid., pp. 54-55.

[5] Ibid., p. 46. "...a majority...have high school grades ranking them in the lower half of their respective graduating classes."

[6] Ibid., p. 46. "The average score made by General College students on this test [ACE] is about equal to a percentile rank of 33 for the national samples of junior colleges. A...check, within the state of Minnesota, shows that the average score made by General College students is somewhat lower than the average score made by all high school seniors in the state on the same form of the [ACE]." The American Council on Education Psychological Examination will be referred to hereafter as the ACE.

[7] The Coöperative English Test will be referred to hereafter as the Coöp.

However, one area has remained, as has been said, comparatively untouched. Until now we have been able only to guess at answers to questions such as the following: How do General College students perform after their transfer to other colleges in the university?[11] How many of those who do transfer earn four-year degrees?[12] What kind of student, on the basis of entrance predictions as well as performance in the General College, succeeds in graduating? What kind of student withdraws? What kind is dropped for low scholarship? In what colleges do these students usually enroll? In what colleges are they most successful? Do any go on to graduate work or professional degrees? Because these questions and many others related to them have gone unanswered, the administration of the General College and its Executive Council decided at the beginning of the academic year 1958-1959 to authorize a study of the students who transfer from the General College to other colleges of the University of Minnesota. Therefore, in the fall quarter of 1958, the project got under way, referred to sometimes as the "Transfer Study" and on other occasions as "The Study of Achievement of General College Students." From that date, work has been in progress: the plan for the study; the method of collecting material; the actual recording of data, first on recording sheets and then on IBM cards; and finally the analysis of findings presented in this document. Uppermost in the investigation have been the aim and effort to serve the General College student more effectively and otherwise than before, still reflecting the philosophy voiced by Dr. Malcolm S. MacLean, the first director of the college, in the editor's foreword to a major study published in 1943:

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[8] The college aptitude rating is herein called the CAR.

[9] The high school rank is herein called the HSR.

[10] "In the Biennial Survey of Scholastic Aptitude for entering freshmen of the fall of 1956, Swanson and Berdie reported on a large-scale summary of the State-Wide Testing Programs to that date. The summary indicated that over a period of more than two decades there was no significant change either upward or downward in the quality of the entering freshmen in Minnesota colleges as indicated by their mean HSR and their mean scholastic aptitude test scores. The data for the entering freshmen of 1958 do not change this general trend." From Edward O. Swanson and Ralph F. Berdie, The Biennial Survey of Scholastic Aptitude of Minnesota College Freshmen, Research Bulletin of the Office of the Dean of Students, Volume 2, Number 3, University of Minnesota, p. 4.

[11] One study was made of performance of General College writing laboratory students after their transfer to other colleges: F. S. Appel, The Achievement in Composition of General College Writing Laboratory Students After Transfer to Other Colleges, The General College, University of Minnesota, 1952.

[12] A short passage in a book by Ruth E. Eckert touches upon the problem of the present study: "Although the group who transferred were among the more academically able General College students they did not, on the whole, succeed too well in their subsequent work. The average number of quarters that they remained in the unit to which they transferred was only four -- obviously far too short a time to complete the new programs. Furthermore, of all those who transferred during this eight-year period [from the founding of the college in 1932, to 1940], slightly less than half either received degrees from other colleges or were still in school at the time this study was made. In general, therefore, we may say that one person out of every eight or nine students who enter the General College is likely to complete a liberal arts or a professional school program. This apparently low percentage can easily be misinterpreted if two facts are not borne in mind -- first, that many General College students lack the interest and the ability to do extended university work; second, that even in the most selective liberal arts colleges, half the students usually fail to complete the program." From Ruth E. Eckert, Outcomes of General Education, p. 88.

> ...all our work was controlled by a vital and little recognized point of view -- that it was the purpose of this analysis and understanding of our students, not to "eliminate the unfit," not to "divide the sheep from the goats, the dumb from the bright, the college material from the non-college material," but instead to direct each student, so far as we were able, to that curriculum, that job, that other training institution, wherein he would find the most use for his powers, whatever they might be, and the deepest personal satisfactions and social usefulness.[13]

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[13] Williams, op. cit., p. xi.

II. PROCEDURE

The subject of the study -- the General College student who achieves transfer to another college of the university -- having been selected, the next step was to determine exactly what to find out about him. It was possible to start with some specific factors already known: to qualify for admission to another college, he must present an average of 65 (C-plus) in all the courses which he has taken in the General College and at least a C average in nine or ten credits in "try-out" courses which he has taken in the other college.[1] For the average "involuntary" matriculant, who makes up four-fifths of the student body of the college, the requirements can be met in one academic year (three quarters at the University of Minnesota), although a good many students devote twice as much or even more time to the task. Such details as have just been summarized have been known for a long time. However, what has not been discovered is the degree of success or failure achieved by such transfer students. Over the years, many a student has been accepted for transfer, probably approximately one-third of those enrolled in the General College in any given year. But once he has had his "transfer interview" and his recommendation for transfer has been approved by the proper authorities in the college to which he sought admission, he has mainly disappeared from view. Except for the relatively few who return to visit and thus to preserve their ties with the General College, the fate of the student who has transferred has remained virtually unknown.

At first, the method of tracing him and of discovering what had become of him seemed relatively simple, as did the question to which an answer was sought: all that appeared necessary, on the surface at least, was to find out how many General College students who transferred to other colleges of the university finally achieved bachelor's degrees. This basic query underlay the numerous preliminary meetings and discussions in which the writer engaged with Leon Reisman, Head of the Division of Literature, Writing, Speech, and Philosophy; George McCutcheon, Assistant Professor of Mathematical Studies; G. Gordon Kingsley, Co-ordinator of Student Personnel Services; and S. Elizabeth McBride, Instructor in Writing Laboratory. However, such conversations, formal and informal, quickly produced related questions, which in turn demanded that additional information be gathered concerning the transfer student's high school background and record; his scores on certain predictive tests like the ACE and the English Coöp; the quality of his performance in the General College; his eventual success in terms of degrees or even honors, or his withdrawal from the university, or any "drop" action taken against him; and the length of his tenure in the General College and in the other college to which he transferred.

Soon it became obvious that such a range of material could be procured only from official transcripts available in the Office of Admissions and Records. Consequently, authorization for the purchase of such blueprints was sought and obtained from the administration and the Executive Council of the college, on the promise that information gathered include not only what was pertinent to the project described above, but also material useful in determining the records of these transfer students in the specific subject-matter fields: writing, speech, literature, philosophy, social studies, and natural science and mathematics.

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[1] This record admits him in general to the College of Science, Literature, and the Arts, and also via that college to the School of Business Administration and to the secondary school programs of the College of Education. Admission to the Institute of Technology is contingent upon his fulfilling certain requirements in advanced mathematics, and there are certain variations also in admission prerequisites for the four-year programs in the College of Education. In addition, the College of Agriculture, Forestry, and Home Economics sets up its own admission standards.

Following the permission to proceed with accumulation of what promised to be masses of data, came further meetings and more conversation which produced a definition of time limits for the project: in order to have a substantial group of students to work with, a period of five consecutive academic years was set aside, together with the two summer sessions involved with each. Furthermore, so that the study would represent a recent student population and also so that the terminal date would allow time for as many students as possible to finish bachelor's degrees after their transfer date and in time for inclusion in this study, it was decided that the gathering of material would begin with the transcripts of students who left the college in the fall quarter, 1951, and that it would extend through the second summer session, 1956 (the actual work began in the winter quarter of 1959, and the final check of those still in school when recording started terminated in the winter quarter, 1960).

The next step was to discover the names of students who had transferred within the prescribed five-year period. (No limit was set regarding the date of their original registration in the General College or in the university, although eventually two names were eliminated from consideration since their admission to the college had taken place so early in the history of the college that grading practices were entirely different from those in use now.[2]) The writer was granted permission by True E. Pettengill, university recorder, to use a card file compiled by the Office of Admissions and Records and verified for completeness and accuracy by Principal Clerk Loretta Cannon, under whose supervision the file is maintained. One other faculty member, S. Elizabeth McBride, and two teaching assistants, Caroline M. Gilbert and James H. Elsenpeter, coöperated with the writer in the enormous initial task, that of drawing up lists of names -- by quarters and by years -- of students who had transferred during the five-year period decided upon. These lists were then submitted to Mrs. Alma DeVaughn, principal clerk in the Office of Admissions and Records, who was asked to provide a full transcript of college work for each name on the list, with the final result that for every individual in the study at least two transcripts were procured, one of his record in the General College and one of his record in the college to which he had transferred. More often than not, however, three and sometimes four blueprints were involved, for many students transfer more than once before completing their career at the university.[3] Most of the transcripts were delivered by the Office of

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[2] When the college began, three grades were used: H (for honors), P (for pass), and W (for anything not included by the first two). The students who were omitted had earned such grades.

[3] The customary avenue to the School of Business Administration, for instance, is for the student to spend at least one quarter and perhaps even two or three quarters in the College of Science, Literature, and the Arts en route, since the School of Business Administration is a senior college only. Frequently, too, a prospective high school teacher may go to the College of Science, Literature, and the Arts before entering the College of Education, although he may also enroll in the College of Education directly after three or more quarters in the General College, depending upon what program he may wish to pursue.

Admissions and Records early in January, 1959, although for approximately two months it was necessary to check individual names in order to find the complete records, particularly of persons who had transferred to the College of Agriculture, Forestry, and Home Economics where a separate record is made and then kept of the student's performance on the St. Paul campus. Also, inquiries addressed to the University of Minnesota, Duluth, concerning three students who had been granted permission to enroll there, yielded the information that these students had not completed the transfer, so that their names were dropped from the official list. Moreover, as the transcripts were checked into the study proper, some representing students who had been approved for admission to other colleges on the Minneapolis and St. Paul campuses, but who had not pursued the opportunity, were also eliminated from consideration. Finally, the remaining transcripts were arranged to conform with the lists of names, and these lists were coded by number, in preparation for the eventual recording of data.

Another fruitful source of information about the General College student is his permanent folder, which contains a record of the classes which he takes, copies of his transcripts during his residence in the college, a personal inventory blank which he fills out at the time of his entrance into the university, his application blank for admission to the university with a record of his high school performance and his scores on various ability tests (almost always the ACE and English Coöp, sometimes the Ohio Psychological Examination and IQ), a report on his various experiences with the college comprehensive examination, any interview notes made by counselors or teachers after conversation with the student himself or with someone else about him, a copy of the blank on which recommendation for his transfer is sent to the college to which he applies. Such permanent folders are kept in the active file as long as students are enrolled in the college and for a limited time thereafter; then after the students' departure, the folders are preserved in a special file, always available for use by authorized persons. In order to make the data for the transfer study as complete and as accessible as possible, it was decided to pull the folder of each student who was to figure in the project and to arrange these folders to correspond with the order of the lists and transcripts. Subsequently, the folders proved to be even more useful than had been anticipated, for they provided material that transcripts were expected to contain, but sometimes did not. Also, the folders were employed in assembling on a separate set of cards the results of each student's performance on three areas (Social Studies; Natural Science and Mathematics; and Literature, Speech, and Writing) of the comprehensive examination. The last-mentioned information will not appear in the present report, but will figure instead in future studies regarding the relation of success with the comprehensive examination to performance after transfer from the General College. Also, it is intended to investigate any correlation which may exist between grades in given courses of the various areas of study within the college and subsequent scores on related parts of the comprehensive.

When the transcripts and folders were substantially in hand and arranged to conform with one another, the actual recording of data began. The procedure was four-pronged, since four separate areas of the college desired four kinds of information, much of it interrelated, even so. To fill the needs of three areas -- the personnel services; the Division of Writing, Speech, and Philosophy; and the Division of Social Studies -- the writer devised two recording sheets;[4] and to satisfy the requirements of the Division of Natural Science and Mathematics, George McCutcheon and David Giese composed a data sheet for that area.[5] In all three cases, the recording devices were so set up as to permit coding for eventual transfer of data to IBM cards. These sheets the recorders worked on simultaneously, entering the performance of each student as it appeared according to his official transcript and his permanent folder.

For the purposes of the present study, the writer constructed one sheet[6] on which to collect various items about the transfer student in general: sex; whether or not an Associate in Arts degree was earned before or after transfer or at all; age at time of transfer in terms of younger or older than age twenty; kind of high school (public, private, private-parochial); location of high school (Minneapolis, St. Paul, suburban, large city, small town, out-of-state, out-of-United States); no diploma if none had been earned; year of transfer; number of transfers; high school rank; score on ACE; score on English Co8p; CAR; College transferred to; major in college; degree if one or more were earned; honors if any were awarded at graduation; drop for low scholarship at whatever stage after transfer; withdrawal after how many quarters following transfer; number of quarters spent in the General College; number of quarters spent in the other college after transfer; number of quarters of advanced standing (*i.e.*, pre-General College), if any; percentile average earned in the General College. On this same sheet, spaces were provided also to set down information about the student's performance in courses in writing, speech, literature, and philosophy, both during his stay in the General College and subsequent to his transfer. The latter will be used in future separate studies for the specific use of the Division of Literature, Writing, Speech, and Philosophy, just as the two other sheets concerning social studies and natural science and mathematics will provide material for studies concerning those two areas of the college.

The actual recording of the above data was carried out by Miss Gilbert, Mr. Elsenpeter, and the writer, with the help of two clerical workers hired especially for this work. This part of the project required some three months to accomplish so that it was not until the spring quarter, 1959, that the coding for IBM cards could begin. However, before the coding process was undertaken, Mr. Elsenpeter ran a test on the recording sheets to determine the percentage of error in the compilation of information. The five persons mentioned above had recorded approximately equal amounts of material. Using the Table of Random Numbers to determine which transcripts and sheets to check, he examined five samples from each recorder, having established that an average of forty pieces of information had been taken from each transcript. Therefore, he concluded that he had checked two hundred items from the work of each of the five compilers. One, he discovered, had made two errors; each of two, three errors; one, five errors; and the fifth, thirteen errors. Again employing the Table of Random

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[4] See Appendix, Figure 1 and Figure 2.

[5] See Appendix, Figure 3.

[6] See Appendix, Figure 1 and Figure 4.

Numbers, Mr. Elsenpeter tested five more samples of the work of the compiler who had made five errors, this time discovering no discrepancies at all, so that he did not look further into that individual's performance. Then, excluding the compiler who had made thirteen errors, he determined that the other four had committed a total of eighteen errors in gathering eight hundred pieces of information: i.e., the percentage of error for these four compilers was 1.6. Finally, the compiler who had originally made two errors and one of those who had made three checked and corrected wherever correction was necessary all of the work which the compiler with thirteen errors had done on the the whole study. Only then was it deemed reasonable and valid to say that the percentage of error in the spot check was 1.6 per cent and to project this figure into the entire study, concluding that 1.6 was indeed the percentage of error for the whole project.

While the recording was in process, the writer devised a plan for coding each item of information for transfer to IBM cards. This plan actually consisted of three separate pages of symbols, accounting for most of the possible punches on an IBM card.[7] In order not to have to use more than one card for the information pertaining to both personnel services and the Division of Literature, Writing, Speech, and Philosophy, all of which had been tallied on a single recording sheet,[8] a plan was conceived whereby some columns were double-punched and some R and X punches were also used. Mr. Elsenpeter and Miss Gilbert, with one clerical worker hired for the job, finished the coding at the end of the spring quarter, 1959. Again Mr. Elsenpeter ran a check for error, this time finding a total of only six discrepancies among 2280 items of information and concluding that here the percentage was only .002 and that that percentage could then reasonably be projected into the entire coding procedure. Following this validation, the material was transferred to IBM cards in the Tabulating Research Laboratory of the Numerical Analysis Center on the Minneapolis campus and the cards themselves also verified there in the laboratory. From early in July, 1959, until March, 1960, the cards have been in the hands of two statisticians, David Giese and Garrett Mandeville (both faculty members in the Department of Natural Science and Mathematics of the General College), who have organized the data following a general plan drawn up coöperatively by them and the writer in a series of weekly meetings.

Such masses of information as those yielded by the compilation described above could obviously be treated in a number of ways, depending upon the objectives envisioned for the study. Since the aim from the beginning has been the traditional aim of the college -- to help faculty advisers and counselors to serve the student better and more efficiently than before -- it was decided that the study might best be organized, not historically quarter-by-quarter or year-by-year, but in terms of the students themselves and what happened to them after they had left the General College for other colleges at the university. Accordingly, the ensuing chapters will be devoted to a study of those General College students who transferred to each of the other colleges, with comment on those who were awarded degrees or withdrew or were dropped for low scholarship from those colleges, on those who went on to earn graduate or professional degrees, as well as on those who received two-year degrees other than the Associate in Arts given by the General College. Finally, all the students who transferred will be considered in a separate chapter as a single group, and their abilities and performance analyzed as a whole by the same procedure as that outlined for the separate colleges. It is hoped that through this research and discussion, both faculty advisers and counselors will gain additional useful information to include in their interviews with the many General College students who aspire to transfer and, naturally, to win what is for them a prestigious and coveted prize, a bachelor's degree at the University of Minnesota.

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[7] See Appendix, Figure 5.

[8] See Appendix, Figure 1.

III. STUDENTS ORIGINALLY REGISTERED IN THE GENERAL COLLEGE

One distinct group, certainly the largest to be considered in this study, is composed of students who were originally registered in the General College and who then transferred to one of the other colleges within the university: the College of Science, Literature, and the Arts; the College of Education; the School of Business Administration; the College of Agriculture, Forestry, and Home Economics; and the Institute of Technology. These young men and women were, as has been said earlier, enrolled in the General College usually because their high school rank (HSR) and their score on the American Council on Education Psychological Examination (ACE) averaged out at a college aptitude rating (CAR) lower than 40, which average they would have needed to achieve in order to be admitted to one of the other colleges.[1] Only about one-fifth of the General College population is made up of what are usually called "voluntary" matriculants, although even these have made a free election to enroll in the college. It is generally said that approximately one-third of the General College student body eventually transfers to another college within the university, most of these from the group originally registered in the college and described above, and the rest students who qualified for admission to one of the other colleges, but because of scholastic failure were dropped by the other college and given the alternative of leaving the university or enrolling in the General College. It is the original registrants, however, with whom this chapter is concerned, specifically with those original registrants who achieved transfer. From the beginning of the fall quarter, 1951, through the second summer session, 1956, 975 such students -- 855 men and 120 women -- were counted. Of the men, 402 earned degrees in the various colleges of the university, 392 withdrew, and sixty-one were dropped for low scholarship; of the women, fifty-nine earned four-year degrees, fifty-eight withdrew, and three were dropped by the university. Within the total group, both men and women, 461 degrees were awarded, 450 students withdrew, and sixty-four made a poor enough scholastic record to be asked to leave the university. These figures, as well as those related to the various separate colleges on the University of Minnesota campuses, may be seen on the table immediately below. (See Table 1.)

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[1] The Institute of Technology had certain prerequisites to be met in mathematics. If a student could not meet those, he entered the S.L.A. college. But if his CAR was not high enough to meet S.L.A. admission requirements, he came instead to the General College.

Table 1

Summary table of original General College students who received degrees, withdrew, or were dropped for low scholarship in four-year programs

College		Degree	Withdraw	Drop	Total
			Men		
SLA[a]		202	219	24	445
Education		99	67	9	175
Business		77	30	11	118
Ag.		13	26	1	40
I.T.		11	50	16	77
	Total	402	392	61	855
			Women		
SLA[a]		13	36	2	51
Education		45	18	1	64
Ag.		1	4	--	5
	Total	59	58	3	120
			Grand Totals		
		461	450	64	975

[a] Including the students who transferred to the S.L.A. college and then transferred to other programs (except business and education) for which study in S.L.A. prepared them.

The ensuing divisions of this chapter deal with the colleges individually and more particularly with the students who transferred to them.

1. The College of Science, Literature, and the Arts

By far the largest group of students to transfer from the General College entered the College of Science, Literature, and the Arts. Of the 429 who were admitted to the S.L.A. college and were enrolled in the four-year programs there, 391 (ninety-one per cent) were men, and thirty-eight (nine per cent) were women. Still another group, this one of sixty-nine students -- fifty-four men and fifteen women -- entered S.L.A. and then later enrolled in some other program for which the S.L.A. college gives junior college or even more advanced preparation.[2]

There were 172 degree students among the men who pursued four-year liberal arts programs, forty-four per cent of the men who transferred to S.L.A.; on the other hand, there were only seven women, or 18.4 per cent of the thirty-eight who made the transfer, who finished baccalaureate degrees. The degree total for the entire group of original General College registrants was 179 (41.7 per cent).

Among the men, 198 (fifty-one per cent) withdrew from the university before completing their degrees, as did thirty women (seventy-nine per cent). The total withdrawals numbered 228 (53.1 per cent).

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[2] Two other such groups, those who entered the School of Business Administration and some students who eventually went into secondary education programs in the College of Education, are discussed in ensuing separate sections of this chapter.

For both men and women, the number (twenty-two) of those dropped for low scholarship was only 5.2 per cent of the total. Just twenty-one men (five per cent) and one woman (2.6 per cent) were dropped. (See Table 2.)

Table 2
Students who originally registered in the General College and transferred to the College of Science, Literature, and the Arts

	Men		Women		Total	
	N	%	N	%	N	%
Degree	172	44	7	18.4	179	41.7
Withdraw	198	51	30	79.0	228	53.1
Dropped	21	5	1	2.6	22	5.2
Total	391	100%	38	100%	429	100%

Men:

For the men who transferred to the S.L.A. college, majors fall into three categories: social sciences, humanistic studies, and natural sciences. There were 112 degrees in social sciences, sixty-five per cent of the degrees. Of these, slightly over one third (thirty-nine degrees) were earned in history; twenty-two per cent (twenty-five degrees), in sociology; seventeen per cent (nineteen degrees), in economics; thirteen per cent (fourteen degrees), in political science; five per cent (six degrees), in psychology; four per cent (five degrees), in geography; and the final three per cent (four degrees), divided equally between anthropology and international relations. The General College percentile average for this group was 72.2, with the highest average (80 percentile) among the geography majors and the lowest (69.9 percentile) among the history majors. The students in this social science group finished their college work in thirteen quarters (median). (See Table 3.)

Forty-seven men (twenty-seven per cent of the entire degree group) majored in some area of the humanistic studies. Here almost exactly one-third (fourteen) of the degrees were earned in speech; nineteen per cent (eight),in journalism; fifteen per cent (seven), in art; fourteen per cent (six), in interdepartmental majors; nine per cent (four), in architecture; and nineteen per cent (eight) in other areas including German (one), Pre-humanities (one), Latin American Area Studies (one), philosophy (two), Pre-Theology (one), Russian Area Studies (one), and American Studies (one). The General College percentile average for these students who majored in some branch of the humanistic studies was 71.8, the highest average (77.1) being among the miscellaneous majors and the lowest (58) among the art majors. These students completed their university work in thirteen quarters (median). (See Table 3.)

The smallest group of majors, made up of thirteen men (eight per cent of the degree students), was in the area of the natural sciences. There the specializations were five in number: mathematics (four), geology (five), chemistry (one), bacteriology (two), and zoology (one). These thirteen men had earned a General College percentile average of 75.3, a little above those of the other two groups; but they required fifteen quarters (median) to complete their degrees, two quarters longer than did those in social sciences and in the humanistic studies. (See Table 3.)

Table 3
Majors, number, per cent, General College percentile average, and median quarters spent on degree, for men students originally in the General College and transferred to the College of Science, Literature, and the Arts

Major	N	%	GC %ile Average	Median Quarters Spent on Degree
History	39	35	69.9	13.5
Political Science	14	13	73.9	14.0
Economics	19	17	72.0	13.0
Sociology	25	22	73.2	14.0
Geography	5	4	80.0	12.0
Psychology	6	5	70.3	13.0
Other Social Sciences[a]	4	3	75.5	14.0
Total Social Sciences	112	65*	72.2	13.0
Speech	14	33	75.9	13.0
Art	7	15	58.0	13.0
Journalism	8	19	71.9	13.0
Interdepartmental	6	14	71.0	13.5
Architecture	4	9	72.5	14.5
Other Humanistic Studies[b]	8	19	77.1	13.0
Total Humanistic Studies	47	27*	71.8	13.0
Total Natural Sciences[c]	13	8	75.3	15.0
Total	172	100%	72.0	

[a] Anthropology (2), International Relations (2).

[b] German (1), Humanities (1), Latin American Area (1), Philosophy (2), Pre-Theology (1), Russian Area (1), American Studies (1).

[c] Mathematics (4), Geology (5), Chemistry (1), Bacteriology (2), Zoology (1).

*Per cent of tatal degree group.

A look at the mean ability scores for the degree students reveals very little spread among the scores, with the majors in social sciences showing a little higher mean CAR (27) than that of the others, the majors in humanistic studies having a slightly better mean Coöp score (25) than the others, and those in natural sciences having a little advantage on the ACE (27). There is very little difference, either, among the General College percentile averages of the three. Perhaps the only notable margin is in the mean HSR's where the 33 of the majors in social sciences and the 31 of those in humanistic studies is considerably higher than the 22 presented by those specializing in the natural sciences. The men who withdrew from the four-year programs in the S.L.A. college had, except for the mean Coöp score, ability scores very much like those of the degree students; but the men who were dropped for low scholarship, while like the rest in ACE and CAR, fell lower in HSR than the degree students in social sciences and humanities and lower than the withdrawals as well; in addition, those who were dropped did more poorly than any of the rest in General College performance. (See Table 4.)

Table 4
Mean ability scores of men students originally registered in the General College and transferred to the College of Science, Literature, and the Arts

	N	HSR	ACE	Coöp	CAR	GC %ile
Social Sciences	112	33	21	22	27	72.2
Humanistic Studies	47	31	24	25	25	71.8
Natural Sciences	13	22	27	24	23	75.3
Total Degree	172	31	22	23	26	72.0
Withdraw	198	32	23	19	27	72.0
Drop	21	23	31	23	26	66.0
Total	391	31	23	21	27	72.0

The degree students in social and humanistic studies remained in the General College for five quarters (median) and in S.L.A. for nine quarters (median), while those in the natural sciences were in the General College for three quarters (median) and in the S.L.A. college for eleven quarters (median). Those who withdrew and those who were dropped had been in the General College for four quarters (median), but the ones who were asked to leave because of scholastic deficiency remained longer in S.L.A. (five quarters, median) than did the students who left of their own accord (three quarters, median). (See Table 5.)

Table 5
Quarters spent in college by men students originally registered in the General College and transferred to the College of Science, Literature, and the Arts

	Quarters in GC			Quarters in SLA			Total Quarters		
	Q1	M	Q3	Q1	M	Q3	Q1	M	Q3
Social Sciences	3	5	6	7	9	10	12	13	15
Humanistic Studies	3	5	6	7	9	11	12	13	14
Natural Sciences	3	3	5	10	11	11	14	15	17
Withdraw	3	4	6	1	3	5	6	8	10
Dropped	3	4	6	2	5	7	9	11	13

Of the 172 degree students, fifty-one (thirty per cent) had been awarded the Associate in Arts degree by the General College. The highest percentage of A.A.'s was won by fourteen of forty-seven majors in the humanistic studies, while the lowest percentage was achieved by three of the thirteen students who specialized in the natural sciences. About a third of those who majored in the social sciences had A.A. degrees. The percentage of A.A.'s for the students who withdrew (twenty-six per cent) and for the ones who were dropped (twenty-nine per cent) is virtually identical with the percentage of A.A.'s for the entire transfer group of men. (See Table 6.)

Table 6
Men students originally registered in the General College who received the A.A. degree and also transferred to the College of Science, Literature, and the Arts

	Total N	N of AA	% of N
Social Sciences	112	34	33%
Humanistic Studies	47	14	40%
Natural Sciences	13	3	23%
Total Degrees	172	51	30%
Withdraw	198	55	28%
Drop	21	6	29%
Total	391	112	29%

As has been mentioned previously, fifty-four men transferred from the General College to the College of Science, Literature, and the Arts and then went on to other programs for which their work in liberal arts had prepared them. Thirty of these men ultimately were graduated from the various areas of their specialization: Law (eleven), Pharmacy (three), University College (seven), Dentistry (six), Occupational Therapy (two), and Hospital Administration (one). Twenty-one men withdrew from four programs: Law (thirteen), Pharmacy (three), Dentistry (four), and Nursing (one). Only three were dropped for low scholarship, two from the Law School and one from the Medical School. (See Table 7.)

Table 7
Men students originally registered in the General College who entered other programs from the College of Science, Literature, and the Arts

	4-year Degree	Withdraw	Dropped	Total
Law	11	13	2	26
Pharmacy	3	3	-	6
U College	7	-	-	7
Dentistry	6	4	-	10
Medicine	-	-	1	1
O T	2	-	-	2
Nursing	-	1	-	1
Hosp. Ad.	1	-	-	1
Total	30	21	3	54

Of the fifty-four men who transferred to the abovementioned programs after their transfer to S.L.A., eight had earned the Associate in Arts degree in the General College. With only one exception (that of the transfer to the Medical School), the General College percentile averages of these students were above the cut-off point of 65 for transfer. Almost none of the ability scores in this group could be termed really exceptional, despite the fact that the mean HSR for withdrawals from Pharmacy was 58 and the Coöp scores for the one man who was dropped from medicine stood at only 5. (See Table 8.)

Table 8
Mean ability scores, number of A.A. degrees, and percentile average for men students originally registered in the General College who entered other programs from the College of Science, Literature, and the Arts

Program	N	N of AA	HSR	ACE	Coöp	CAR	GC %ile Average
Law (degree)[a]	11	1	24.0	30.7	18.6	27.8	78.1
Law (withdraw)	13	-	26.6	33.3	25.9	29.8	74.5
Law (dropped)	2	-	24.0	62.0	26.0	43.0	80.5
Pharm. (degree)	3	1	21.7	16.7	12.3	19.3	69.7
Pharm. (withdraw)	3	1	58.0	12.7	9.3	38.5	70.3
Dentistry (degree)[b]	6	-	39.2	11.2	6.5	21.9	81.0
Dent. (withdraw)	4	-	48.0	9.7	13.7	29.0	75.3
Hosp. Ad. (degree)	1	-	28.0	16.0	8.0	22.0	76.0
Univ. Coll. (degree)	7	3	36.3	15.3	19.3	25.0	75.4
Occ. Ther. (degree)	2	1	34.0	30.5	8.5	31.0	79.5
Nursing (withdraw)	1	-	18.0	18.0	76.0	18.0	77.0
Medicine (dropped)[c]	1	1	20.0	15.0	5.0	18.0	38.0

[a] Five men were wtill registered in the Law School at this writing.

[b] Three men were wtill registered in the School of Dentistry.

[c] One man was still registered in the School of Medicine.

Combining two groups -- the 391 men who stayed in S.L.A. and the fifty-four who enrolled there and then went on to other programs -- one finds that 44.5 per cent of the degree students remained in the General College for one year and that the other 55.5 per cent stayed for longer than one year. Their mean HSR, mean ACE, and mean CAR are almost identical, but the mean Coöp score for the one-year students is five points higher than for the others, and the General College percentile average for the former is eight points higher. Among the students who withdrew, there is somewhat more spread between the ability scores for the one-year group, but the widest difference is in the General College percentile averages: here the one-year students who withdrew have the same percentile average as the one-year students who received degrees (78), but the withdrawals who were in the General College for more than one year have a percentile average ten points lower (68). The twenty-four men who were dropped for low scholarship show a lower mean HSR (22) than the degree students (31) or the withdrawals (31), a higher ACE (29) than either degree students (22) or withdrawals (23), and a mean Coöp score (23) identical with that of the degree students and three points higher than that of those who withdrew. There is virtually no spread in the mean CAR of the degrees, withdrawals, and drops. But for the General College percentile average, those who stayed for one year or more in the General College and then transferred eventually to graduate or to withdraw had better averages than either the one-year or more-than-one-year (in the General College) category of students who were eventually dropped by the university. Moreover, the mean percentile average is identical for degree students and withdrawals (74), but lower for those who were dropped (64) — indicating perhaps that a student's record in the General College may be a fairly reliable predictor of success in the S.L.A. college. (See Table 9.)

Table 9
Residence in General College, ability scores, and General College percentile averages of men students originally registered in the General College and transferred to the College of Science, Literature, and the Arts

		Men Degree Students				
Residence in GC	N	HSR	ACE	Coöp	CAR	GC %ile
1 year	90	32	22	25	26	78
More than 1 year	112	30	22	20	26	70
Total degree	202	31	22	23	26	74

		Men Withdrawals				
Residence in GC	N	HSR	ACE	Coöp	CAR	GC %ile
1 year	92	32	27	23	29	78
More than 1 year	127	31	20	18	26	68
Total withdraw	219	31	23	20	27	74

		Men Dropped				
Residence in GC	N	HSR	ACE	Coöp	CAR	GC %ile
1 year	8	30	44	22	34	74
More than 1 year	16	18	22	23	21	62
Total dropped	24	22	29	23	25	66

Another vantage point from which to consider the men who received degrees in S.L.A. is to look at them by majors and to try to relate their level of achievement in the General College to their success in the specialization of their choice. The following eleven tables attempt such a correlation based on the figures produced by investigation of transcripts. The tables perhaps speak for themselves and provide the statistical record; the discussion of those tables is admittedly subjective to some degree, founded in part upon groups large enough to be deemed significant and involved in part with very small numbers, too small to be considered representative.

The largest and probably the most significant single unit is composed of the men who received degrees in history. These students required relatively the same length of time to finish their degrees, ranging from a median of 12.3 quarters for the three who had the highest General College percentile average (between 85 and 100) to the fifteen quarters needed by the one who had the lowest average (in the 54 and below bracket). Strangely enough, the CAR (36) for the student with the poorest performance in the General College was the best in the degree group, and those in the highest percentile average range had the lowest mean CAR (21.7). However, the reverse is true of the record on the Coöperative English Test, where the best General College students attained a mean score of 38.3, and the poorest student made a Coöp score of 1.0. Finally, as regards General College performance, twenty-eight of the thirty-nine degree students achieved mean percentile averages of 65 or over, and only eleven fell below the 65 usually necessary for transfer. On the basis of what has been said above, two points appear to emerge: that success in General College courses is related to ultimate academic achievement and that a sufficient number of former General College students have earned degrees in history so that encouragement may be given to those who are interested in that field. (See Table 10.)

Table 10
Men degree students in history, S.L.A.,
originally registered in The General College

GC %ile	N	Qtrs in GC	Qtrs in OC[a]	Total Qtrs	CAR (mean)	Coöp (mean)	Honors or Grad School
85-100	3	3.0	9.3	12.3	21.7	38.3	---
75-84	7	5.4	8.3	13.7	32.7	15.0	---
65-74	18	5.4	8.2	13.6	28.4[b]	23.0	---
55-64	10	6.4	7.1	13.6	30.4[c]	23.1	---
-54	1	7.0	8.0	15.0	36.0	1.0	---

[a] OC = other colleges than the General College.

[b] There was no CAR for one student in this group.

[c] There was no CAR for one student in this group.

For the men who received the B.A. degree in political science, fourteen in all, the students who had the best performance in the General College took less time in school than did the one student with a poor record. Both the mean CAR and the mean Coöp scores for the political science majors are patternless, on the whole, except that the five whose General College percentile average fell between 75 and 84 had the highest mean CAR (24.6) and the highest Coöp score (27) of all. However, it is true here, as for the history majors, that General College percentile averages rise above the cut-off level of 65, with only one of the fourteen men who earned degrees in political science having an average below that -- and he fell considerably lower. (See Table 11.)

Table 11
Men degree students in political science, S.L.A.,
originally registered in the General College

GC %ile	N	Qtrs in GC	Qtrs in OC[a]	Total Qtrs	CAR (mean)	Coöp (mean)	Honors or Grad School
85-100	2	3.5	9.0	12.5	20.0[b]	8.0[c]	---
75.84	5	4.2	9.0	13.2	24.6	27.0	---
65-74	6	6.4	8.4	14.8	19.3[d]	8.4	---
55-64	0	---	---	----	----	---	---
-54	1	7.0	7.0	14.0	21.0	15.0	---

[a] OC = other colleges than the General College.

[b] There was no CAR for one student in this group.

[c] There was no Coöp for one student in this group.

[d] There was no CAR for one student in this group.

Nineteen men earned four-year degrees with majors in economics. No real pattern emerges here as far as length of residence in college is concerned, nor for the mean CAR. But there appears to be some relation between the mean Coöp scores and the performance in the General College since the one man whose percentile average was in the 85 to 100 range had the highest Coöp score (66) and the one whose percentile average was lowest (54 or below) had the poorest result on the Coöp (2.0). For the rest, the levels of both measures descend simultaneously. Here, as in the other units founded on the academic major, only three of the nineteen men fell below the crucial 65 in General College percentile average. Of the sixteen whose average was above the cut-off level, half were in the bracket between 75 and 100. (See Table 12.)

Table 12
Men degree students in economics, S.L.A.,
originally registered in the General College

GC %ile	N	Qtrs in GC	Qtrs in OC[a]	Total Qtrs	CAR (mean)	Coöp (mean)	Honors or Grad School
85-100	1	3.0	9.0	12.0	33.0	66.0	---
75-84	7	3.7	8.9	12.6	28.7[b]	26.3[c]	---
65-74	8	5.7	8.6	14.3	22.9	25.3	---
55-64	2	7.0	6.5	13.5	40.0	15.0	---
-54	1	3.0	10.0	13.0	7.0	2.0	---

[a] OC = other colleges than the General College.

[b] There was no CAR for one student in this group.

[c] There was no Coöp score for one student in this group.

Sociology majors earned twenty-five of the S.L.A. degrees, requiring between 12.7 (median) and fourteen (median) quarters to finish their college work. No particular picture is discernible in their ability scores, but again it may be observed that twenty-one of these men earned General College percentile averages between 65 and 100 and that eleven of those were in the 75 to 100 average. One man whose record in the General College placed him between 75 and 84, but whose CAR (in the 28.9 mean) and Coöp score (in the 10.8 mean) would not have foretold unusual success, was awarded his Bachelor of Arts degree cum laude. (See Table 13.)

Table 13
Men degree students in sociology, S.L.A.,
originally registered in the General College

GC %iles	N	Qtrs in GC	Qtrs in OC[a]	Total Qtrs	CAR (mean)	Coöp (mean)	Honors or Grad School
85-100	2	4.0	10.0	14.0	22.5	14.5	---
75-84	9	3.9	8.8	12.7	28.9[b]	10.8[c]	cum laude
65-74	10	5.5	8.5	14.0	23.8[d]	33.2[e]	---
55-64	3	7.0	6.0	13.0	25.0	54.5	---
-54	1	3.0	10.0	13.0	26.0	6.0	---

[a] OC = other colleges than the General College

[b] There was no CAR for one student in this group.

[c] There was no Coöp for one student in this group.

[d] There was no CAR for two students in this group.

[e] There was no Coöp score for one student in this group.

For the fifteen men who completed the B.A. degree in other social sciences, the quarters of residence in college and the ability scores present no notable pattern. However, here as elsewhere, by far the largest part of the group -- thirteen out of fifteen -- had percentile averages at 65 or above in the General College. Moreover, four of the thirteen were in the top bracket, between 85 and 100. Another point of interest is that two of these men were graduated cum laude although their previous performance, except that in the General College, could not be said to have predicted such a high level of academic achievement. (See Table 14.)

Table 14
Men degree students in other social sciences,[a] S.L.A.,[b] originally registered in the General College

GC %ile	N	Qtrs in GC	Qtrs in GC[c]	Total Qtrs	CAR (mean)	Coöp (mean)	Honors or Grad School
85-100	4	5.5	8.8	14.3	30.5	35.0	1 cum laude
75-84	2	3.0	9.0	12.0	16.5	14.0	1 cum laude
65-74	7	4.2	9.2	13.4	26.5[d]	26.8[e]	---
55-64	2	7.0	7.5	14.5	29.0	38.0	---
-54	0	---	---	----	----	---	---

[a] Including Geography (5), Psychology (6), and other Social Sciences (4).

[b] Including one graduate from the University College with a major related to social science.

[c] OC = other colleges than the General College.

[d] There was no CAR for one student in this group.

[e] There was no Coöp score for one student in this group.

The degree students in humanistic studies have been categorized somewhat arbitrarily for consideration by tables. One natural unit, large enough perhaps to be significant, is composed of fourteen speech majors. Here, as with students in other majors, the quarters in residence at the university and the mean CAR's do not follow any notable trend, but as might be expected of speech majors with whom language is a factor, the levels of General College performance and of mean Coöp scores rise simultaneously. However, the most important single point is tied once more to percentile averages: of the fourteen men who received degrees in speech, only one fell below the level of 65, and eight of the other twelve were in the 75 to 84 and 85 to 100 brackets. (See Table 15.)

Table 15
Men degree students in speech, S.L.A., originally registered in the General College

GC %ile	N	Qtrs in GC	Qtrs in OC[a]	Total Qtrs	CAR (mean)	Coöp (mean)	Honors or Grad School
85-100	2	5.0	8.0	13.0	11.0	22.0	---
75-84	6	3.5	9.0	12.5	33.3	19.2[b]	---
65-74	5	6.0	6.8	12.8	19.2	14.8	---
55-64	1	8.0	6.0	14.0	34.0	2.0	---
-54	0	---	---	----	----	----	---

[a] OC = other colleges than the General College

[b] There was no Coöp score for one student in this group.

Seven men received the Bachelor of Arts degree with majors in art. Admittedly, such a segment is too small to be considered statistically significant. However, much the same observations can be made of these few as have been made regarding some of the larger units: that CAR's and Coöp scores are scattered, but that residence in college may have some relation to General College performance since the students with better records spent less time on their degrees than did the ones with poorer records. But for these seven art majors, as with the others, the largest part of the group (five) had General College percentile averages above 65. (See Table 16.)

Table 16
Men degree students in art, S.L.A., originally registered in the General College

GC %ile	N	Qtrs in GC	Qtrs in OC[a]	Total Qtrs	CAR (mean)	Coöp (mean)	Honors or Grad School
85-100	0	---	---	----	----	----	---
75-84	1	3.0	9.0	12.0	36.0	87.0	---
65-74	4	6.5	6.8	13.2	28.2	12.8	---
55-64	2	7.5	8.5	16.0	36.0	38.0	---
-54	0	---	---	----	----	----	---

[a] OC = other colleges than the General College.

Two points of some interest emerge from the records of the eight men who received the B.A. degree with majors in journalism. First, at least three students had Coöp scores substantially higher than are usually found for General College students, indicating some compatibility between their choice of major and one area of aptitude. Also, the record of performance in the General College is like that of the other male degree groups in S.L.A. in that six of the eight men had percentile averages above 65, four of them between 75 and 84. (See Table 17.)

Table 17
Men degree students in journalism, S.L.A. originally registered in the General College

GC %ile	N	Qtrs in GC	Qtrs in OC[a]	Total Qtrs	CAR (mean)	Coöp (mean)	Honors or Grad School
85-100	0	---	---	----	----	----	---
75-84	4	3.0	9.8	12.8	25.3[b]	25.3[c]	---
65-74	2	4.5	8.0	12.5	24.5	48.5	---
55-64	1	7.0	8.0	15.0	35.0	49.0	---
-54	1	3.0	10.0	13.0	32.0	----	---

[a] OC = other colleges than the General College.

[b] There was no CAR for one student in this group.

[c] There was no Coöp score for one student in this group.

The smallest group of all is made up of four men who were awarded the Bachelor of Arts degree in architecture. Three of them were good students in the General College, with percentile averages between 75 and 100, while the fourth fell in the lowest division of percentile averages (54 or below). One of the four degree students registered subsequently in the Institute of

Technology, where he completed the Bachelor of Architectural Engineering degree. (See Table 18.)

Table 18
Men degree students in architecture, S.L.A.
originally registered in the General College

GC %ile	N	Qtrs in GC	Qtrs in OC[a]	Total Qtrs	CAR (mean)	Coöp (mean)	Honors or Grad School
85-100	1	3.0	9.0	12.0	27.0	1.0	---
75-84	2	3.5	11.5	15.0	34.5	7.5	1 B Arch Eng
65-74	-	---	---	----	----	----	---
55-64	-	---	---	----	----	----	---
-54	1	5.0	12.0	17.0	53.0	21.0	---

[a] OC = other colleges than the General College.

Fourteen students earned S.L.A. degrees in a miscellany of major areas in humanistic studies and languages. Within this group there appears to be fairly little relation between General College performance and residence at the university or ability scores. However, as by now seems fairly usual for the men who transfer to the arts college, twelve of the fourteen students in the unit earned percentile averages above 65 in the General College, eight of them between 75 and 100. One man in the 75-84 range of percentile averages was graduated magna cum laude, the highest honor won by any student in the entire transfer population. (See Table 19.)

Table 19
Men degree students with majors in other humanistic studies[a]
and languages,[b] S.L.A., originally registered in the General College

GC %ile	N	Qtrs in GC	Qtrs in OC[c]	Total Qtrs	CAR (mean)	Coöp (mean)	Honors or Grad School
85-100	3	3.0	9.7	12.7	21.0	21.3	---
75-84	5	4.4	7.8	12.2	22.8[d]	31.2	1 magna cum laude
65-74	4	3.3	9.0	12.3	33.0[e]	35.0[f]	---
55-64	2	5.5	8.0	13.5	28.5	19.0	---
-54	-	---	---	----	----	----	---

[a] Including interdepartmental majors (6), philosophy (2), humanities (1), pre-theology (1), American studies (1).

[b] Including Latin American area studies (1), Russian area studies (1), German (1).

[c] OC = other colleges than the General College.

[d] There was no CAR for one student in this group.

[e] There was no CAR for two students in this group.

[f] There was no Coöp score for one student in this group.

Of the thirteen men who earned degrees in one of the natural sciences or in mathematics, nine had achieved General College percentile averages above 65, somewhat more than half of them between 75 and 100. With these students, residence at the university rose in length of time as General College performance went down in quality, and the mean CAR record follows almost the same course. Except for the fact that the two students who were in the 85 to 100 range of percentile averages had a mean Coöp score of 18.5 and those in the next lowest percentile bracket had a mean Coöp score of 38.5, the trend in the Coöperative English Test scores is much like that of the CAR. (See Table 20.)

Table 20

Men degree students in natural science,[a] S.L.A., originally registered in the General College

GC %ile	N	Qtrs in GC	Qtrs in OC[b]	Total Qtrs	CAR (mean)	Coöp (mean)	Honors or Grad School
85-100	2	3.0	10.0	13.0	30.5	18.5	---
75-84	3	3.3	10.0	13.3	23.5[c]	38.5[d]	---
65-74	4	4.0	9.7	14.7	25.7	21.0	---
55-64	3	6.0	9.5	15.5	20.3	20.0	---
-54	1	5.0	10.0	15.0	7.0	17.0	---

[a] Including mathematics (4), geology (5), chemistry (1), bacteriology (2), zoology (1).

[b] OC = other colleges than the General College.

[c] There was no CAR for one student in this group.

[d] There was no Coöp score for one student in this group.

Women:

The number of women (thirty-eight) who transferred to four-year major areas in the S.L.A. college and to other programs from S.L.A. (fifteen) is so small that when each group is divided into degrees, withdrawals, and drops, the only significant unit is made up of those who withdrew (thirty-six students).

Of the thirty-eight women in the four-year majors, only seven (18.4) per cent continued at the university long enough to complete work on a bachelor's degree. Thirty (seventy-nine per cent) withdrew, and only one (2.6 per cent) was dropped for low scholarship. (See Table 2, page 13.)

The seven degrees were taken in as many different majors: American Studies, art, sociology, English, history, humanities, and Spanish. Certain apparent inconsistencies appear within this segment of transfer students: for instance, the HSR for the withdrawals (39, mean) and for the student who was dropped (33) is higher than for the degree students (30, mean); the ACE (27) of the student who was dropped is higher than the mean ACE's for either the degree students (15, mean) or the withdrawals (21, mean); the mean Coöp score (41) for the withdrawals is substantially higher than for the other two; and the CAR for withdrawals (31, mean) and for the student who was dropped (30) is considerably above that of the degree students (23, mean). On the other hand, the degree students and the withdrawals had notably better

General College percentile averages (78 and 76 respectively) than did the student who was dropped (64). It should be kept carefully in mind, however, that the group of withdrawals forms the only really substantial number here and that the one young woman who was dropped for low scholarship is of interest only as an individual. (See Table 21.)

Table 21
Mean ability scores of women students
originally registered in the General College and transferred
to the College of Science, Literature, and the Arts

	N	HSR	ACE	Coöp	CAR	GC %ile
Degree[a]	7	30	15	24	23	78
Withdraw	30	39	21	41	31	76
Drop	1	33	27	23	30	64
Total	38	37	20	37	30	76

[a] These degrees represent single majors in the following subjects: American Studies, art, sociology, English, history, humanities, and Spanish.

The seven women who earned the B.A. degree spent five quarters (median) in the General College and required twelve quarters (median) to complete their university work. Those who withdrew transferred sooner, after three quarters (median) in the General College, but persisted in their college courses for only six quarters (median) in all. (See Table 22.)

Table 22
Quarters spent in college by women students
originally registered in the General College and transferred
to the College of Science, Literature, and the Arts

	Quarters in GC			Quarters in SLA			Total Quarters		
	Q1	M	Q3	Q1	M	Q3	Q1	M	Q3
Degree[a]	3	5	6	7	8	9	12	12	13
Withdraw	3	3	4	1	2	4	4	6	7
Drop[b]	-	-	-	-	-	-	--	--	--

[a] Only seven degrees were awarded here.

[b] Only one of the total of thirty-eight female students was dropped.

Six (sixteen per cent) of the young women in the transfer group earned the Associate in Arts degree which is granted by the General College. Two of these represented twenty-nine per cent of the four-year degree students, and the other four were thirteen per cent of those who withdrew. The student who was dropped for low scholarship had no A.A. degree. (See Table 23.)

Table 23
Women students originally registered in the General College
who received the A.A. degree and also transferred
to the College of Science, Literature, and the Arts

	Total N	N of AA	% of N
Degree	7	2	29%
Withdraw	30	4	13%
Drop	1	-	0
Total	38	6	16%

All seven of the women who completed the B.A. degree in the S.L.A. college had General College percentile averages at 65 or above, and with the single exception of the young woman who majored in Spanish and required five years to complete her degree, they were graduated within twelve or thirteen quarters. In this group, the students who had the highest CAR's and the highest Coöp scores also were in the top bracket of General College percentile averages, though such apparently logical relationships are the exception rather than the rule among transfer students. Ironically, the student who majored in Spanish had the lowest Coöp score (3.0), though reasonably enough the student who majored in English had the top score (75) on the Coöp. It should be remembered that each degree represents a different student with a different major here and that, therefore, no inferences regarding General College transfer students ought to be drawn from the records. (See Table 24.)

Table 24
Women degree students in S.L.A.
originally registered in the General College

GC %ile	N	Qtrs in GC	Qtrs in OC[a]	Total Qtrs	CAR (mean)	Coöp (mean)	Major Field
85-100	1	3.0	10.0	13.0	28.0	37.0	Art
	1	3.0	9.0	12.0	32.0	75.0	English
75-84	1	3.0	10.0	13.0	25.0	29.0	Am. Studies
	1	4.0	8.0	12.0	----	13.0	History
65-74	1	5.0	8.0	13.0	20.0	6.0	Sociology
	1	6.0	7.0	13.0	8.0	11.0	Humanities
	1	7.0	8.0	15.0	23.0	3.0	Spanish

[a] OC = other colleges than the General College.

Fifteen women students who entered other programs after a stay in the S.L.A. college make up the last group. Eight of them received degrees (a much higher proportion than of the students who stayed in S.L.A. after their transfer from the General College): one in the University College, one in Nursing, two in Occupational Therapy, and four in Dental Hygiene.[3] Six of these students withdrew from the university, four from Nursing and two from Dental Hygiene; just one was dropped for low scholarship, that one from Nursing. (See Table 25.)

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[3] Dental Hygiene is not to be confused with the two-year program in Dental Assisting which students take while they are students in the General College. Although it is possible for students to enter the Dental Hygiene program as freshmen and to receive the G.D.H. in two years, the young women with whom this study is concerned spent at least a year in the General College before entering the Dental Hygiene curriculum. Because their degrees required of them at least three years of university work, they are, somewhat arbitrarily perhaps, included in this group of degree students.

Table 25
Women students originally registered in the General College who entered other programs from the College of Science, Literature, and the Arts

	4-year Degree	Withdraw	Dropped	Total
University College	1	-	-	1
Nursing	1	4	1	6
Dental Hygiene[a]	4	2	-	6
Occupational Therapy	2	-	-	2
Total	8	6	1	15

[a] The degree in Dental Hygiene required three years.

On the whole, though certainly not invariably, the ability scores of the young women who went into other than S.L.A. four-year degree programs were quite high in terms of the General College student population. However, although their General College percentile average was in three cases above the cut-off point of 65, the others were below that point, the lowest being that of the student who was dropped from the course in Nursing. Since this group of students is so miscellaneous in character, it does not seem feasible to attempt to draw any inferences or judgments about it. (See Table 26.)

Table 26
Mean ability scores, number of A.A. degrees, and General College percentile average of women students originally registered in the General College who entered other programs from the College of Science, Literature, and the Arts

Program	N	N of AA	HSR (mean)	ACE (mean)	Coöp (mean)	CAR (mean)	GC %ile Average
Univ Coll (degree)	1	1	45.0	32.0	83.0	39.0	82.0
Nursing (degree)	1	-	53.0	20.0	80.0	37.0	----
Nursing (withdraw)	4	1	53.0	9.8	32.3	31.8	61.5
Nursing (drop)	1	-	36.0	12.6	24.3	24.4	51.9
Occ.Ther (degree)	2	-	46.0	22.0	62.0	34.0	66.0
Dent Hyg (degree)	4	-	46.5	27.0	42.5	37.0	62.0
Dent Hyg (withdraw)	2	-	40.5	30.0	58.0	36.0	68.0

Conclusions:

Within the very large group of students, men and women, who transferred from the General College to the College of Science, Literature, and the Art, numerous unassessable characteristics appear, so that in many respects broad judgments are not only unwise, but impossible. But some generalizations may be formed, even so. For instance, it would appear that ability scores like the ACE and the Coöp as well as the HSR, which is used as a predictor based upon past performance, are not wholly satisfactory as foretellers of future academic performance. For although many of these students appear to be somewhat superior in college aptitude to the average students in the General College, this level of aptitude alone is not enough to indicate that they are able to fulfill requirements for a baccalaureate degree. Too many others fall lower, even considerably lower, than the usual General College student on these ability scores, and despite that fact, they, too, achieve degrees, even as some of those with higher scores are falling out for one reason or another. The crucial factor in success appears somehow to be tied to performance in General College courses, where the "late bloomers" are encouraged to raise their heads. Such a conclusion is based upon the fact that so many of those who achieved degrees were good students in the General College, many with percentile averages higher than 65 and relatively few with averages lower than that. The students who withdrew, often obviously for other than academic reasons, had a record similar to that of the degree winners; and only those whom the university dropped were, on the whole, borderline students as far as General College performance is concerned.

2. The College of Education

The second largest transfer group -- 175 men and sixty-four women, totaling 239 students -- enrolled in the College of Education.[4] Of this number, ninety-nine men (fifty-seven per cent) completed four-year degrees, and forty-five women (seventy per cent) did likewise. From the whole group, sixty-seven men (thirty-eight per cent) withdrew, and nine (five per cent) were dropped for low scholarship; and among the women, eighteen (twenty-eight per cent) withdrew, and one (two per cent) was dropped by the university for scholastic reasons. (See Table 27.)

Table 27
Students who originally registered in the General College and transferred to the College of Education

	Men		Women	
	N	%	N	%
Degree	99	57	45	70
Withdraw	67	38	18	28
Dropped	9	5	1	2
Total	175		64	

Men:

Degrees won by the men in education can be divided into five categories: academic subjects, Industrial Education, Physical Education, Recreational Leadership, and Elementary Education. Of the total of ninety-nine degrees, twenty-six were awarded in academic subjects representing a variety of majors: natural science (2), mathematics (1), social studies (8), speech (1), French (1), Distributive Education (2), Core Curriculum (1), German (2), art (5), and music (3). The other general categories are represented as follows: Industrial Education (14), Physical Education (23), Recreational Leadership (30), and Elementary Education (6). Obviously, more than half of the degrees went to students specializing in either Physical Education or Recreational Leadership, and only a generous fourth to those in academic or subject matter programs. The students with academic majors spent about the same length of time earning their degrees as did those in the other areas, but their General College percentile average was higher by five points (73) than that of all the other groups combined (68). However, it should be noted that the students in Industrial Education had about the same percentile average (72) as did those in academic programs and that those in Elementary Education had a percentile average identical with that of the academic majors. Only those in Recreational Leadership fell below the cut-off point of 65, with an average of 59. (See Table 28.)

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[4] Most of those referred to in this study as having academic majors came to the College of Education after a prior transfer to and residence in the S.L.A. college.

Table 28
Majors, number, per cent, General College percentile average, and median quarters spent on degree for men students originally registered in the General College and transferred to the College of Education

Major	N	%	GC %ile Average	Median Quarters Spent on Degree
Natural Science	2	2	79	16
Mathematics	1	1	92	12
Social Studies	8	8	82	14
Speech	1	1	45	17
French	1	1	90	14
Distributive Ed	2	2	72	15
Core Curriculum	1	1	70	14
German	2	2	68	15
Art	5	5	61	15
Music	3	3	66	14
Total Academic Majors	26	26	73	14
Industrial Ed	14	14	72	13
Physical Ed	23	23	65	15
Recreational Lead	30	31	59	14
Elementary Ed	6	6	73	13
Total Degrees	99	100	68	

An examination of the mean ability scores of the men who transferred to the College of Education reveals that at all points -- HSR, ACE, Coöp, and CAR, as well as General College percentile average -- the degree students with subject matter specializations, including the academic majors as well as those in Industrial Education and Elementary Education, surpassed those who specialized in Physical Education and Recreational Leadership. Moreover, the ability scores and the General College performances of those who withdrew are quite similar to those of the men who received degrees in Physical Education and Recreational Leadership, and the scores for those who were dropped are about at the same level, except that here the General College percentile average falls off sharply to 51. (See Table 29.)

Table 29
Mean ability scores of men students originally registered in the General College and transferred to the College of Education

	N	HSR	ACE	Coöp	CAR	GC %ile
Subject Matter	46	35	20	15	28	73
PE and Rec Lead	53	25	16	13	21	62
Total Degree	99	30	18	14	25	68
Withdraw	67	25	16	16	20	62
Dropped	9	22	20	15	21	51
Total	175	28	17	15	23	65

The men who transferred to the College of Education remained at the university for varying lengths of time. Those who majored in subject matter fields, again including those in academic fields as well as in Industrial Education and Elementary Education, required fourteen quarters (median) to complete their degrees, and those who graduated in Physical Education and Recreational Leadership remained in college for fifteen quarters (median). The men who withdrew, in all programs, persisted for ten quarters (median), and those who were dropped stayed for eight (median). (See Table 30.)

Table 30
Quarters spent in college by men students originally registered in the General College and transferred to the College of Education

	Quarters in GC			Quarters in Other Colleges			Total Quarters		
	Q1	M	Q3	Q1	M	Q3	Q1	M	Q3
Subject Matter	3	5	6	7	9	10	12	14	15
PE and Rec Lead	5	6	7	7	9	10	13	15	16
Withdraw	3	6	7	2	5	6	8	10	12
Dropped	3	6	8	1	2	3	5	8	9

Certain observations may be made concerning the experience of these men students during their sojourn in the General College. For example, of the forty-six who received degrees in the subject matter curricula, nineteen (forty-one per cent) also earned the Associate in Arts degree in the General College, and of the fifty-three who graduated in Physical Education and Recreational Leadership, seventeen (thirty-two per cent) had qualified for the A.A. degree. Among the sixty-seven men who withdrew, sixteen (twenty-three per cent) had A.A. degrees, and even of the nine who were dropped from the university, three possessed the General College degree. These percentages are comparable to those found for transfers to the College of Science, Literature, and the Arts, but somewhat higher than those found for the men who transferred to the other schools and colleges at the university. (See Table 31.)

Table 31
Men students originally registered in the General College who received the A.A. degree and also transferred to the College of Education

	Total N	N of AA	% of Total
Subject Matter	46	19	41%
PE and Rec Lead	53	17	32%
Total Degrees	99	36	35%
Withdraw	67	16	23%
Dropped	9	3	33%
Total	175	55	31%

It is possible also to make some tentative comments about the length of residence of these men in the General College and about the relation of period of residence to performance. Within the degree group in subject matter programs, for instance, approximately thirty-seven per cent of the men had remained in the General College for one year before transfer;[5] except for their mean Coöp score, those who were in the college for just one year had ability scores a little higher and a General College percentile average appreciably higher than did those (forty-three per cent) who remained for more than one year. Although in the Physical Education-Recreational Leadership group only fifteen per cent left the General College after a single year, their ability scores and percentile averages were again higher than for those who stayed longer before transfer. Much the same pattern as for degree students holds true for those who withdrew and those who were dropped, though some variations do appear. (See Table 32.)

Table 32
Residence in General College, ability scores, and General College percentile averages of men students originally registered in the General College and transferred to the College of Education

Secondary Education Degrees

Residence in GC	N	HSR	ACE	Coöp	CAR	GC %ile
1 year	17	37	22	9	30	79
More than 1 year	29	33	19	19	26	69
Total	46					

Physical Education and Recreation Leadership Degrees

Residence in GC	N	HSR	ACE	Coöp	CAR	GC %ile
1 year	7	26	34	30	30	72
More than 1 year	46	25	14	10	19	60
Total	53					

Withdraw

Residence in GC	N	HSR	ACE	Coöp	CAR	GC %ile
1 year	23	33	20	21	24	70
More than 1 year	44	21	14	27	18	57
Total	67					

Dropped

Residence in GC	N	HSR	ACE	Coöp	CAR	GC %ile
1 year	3	26	17	34	22	68
More than 1 year	6	20	21	6	21	52
Total	9					

It is particularly interesting to observe the relation of General College performance of degree students in education to over-all achievement at the university. For instance, of the eighteen men who majored in what were originally termed academic subjects, excluding now the skills of music and art, seventeen had General College percentile averages at 65 or above, nine had averages above 75, and six had averages above 85; only one showed a percentile average in the range of 54 and below, and it can be noted about him that the period which he required to complete his degrees was longer than that of the others by a year or more. Performance of this group on the various aptitude tests was scattered: those who earned the highest percentile averages during their residence in the General College also had the highest mean CAR (36), but they had the lowest mean Coöp score (14.2). On the other hand, the one student who stord in the lowest place with regard to General College percentile average was second highest on both CAR (30) and Coöp (22). Another point of interest is that one man who placed in the top bracket of General College percentile averages was graduated from the university with distinction. If the figures cited have any meaning, it may perhaps be that performance in the General College has some relation to success for students who are interested in majoring in the so-called academic subjects. However, the total number here is small, and the majors are diversified, so that any inferences must be quite tentative. (See Table 33.)

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[5] Only rarely does a student originally registered in the General College transfer before he has completed a year there. One who did so would be the exception, far from the rule.

Table 33
Men degree students in Secondary Education (academic subjects) originally registered in the General College

GC %ile	N	Qtrs in GC	Qtrs in OC[a]	Total Qtrs	CAR (mean)	Coöp (mean)	Honors or Grad School
85-100	6	4.7	8.4	13.1	36.0[b]	14.2[c]	1 with dist.
75-84	3	4.3	8.7	13.0	19.8	31.5	---
65-74	8	5.1	9.0	14.1	24.8	15.0	---
55-64	0	---	---	----	----	----	---
-54	1	7.0	10.0	17.0	30.0	22.0	---

[a] OC = other colleges than the General College.

[b] There was no CAR for two students in this group.

[c] There was no Coöp score for one student in this group.

In the next group, the eight who majored in music and art (called skills in the table heading) showed a trend the reverse of that for the majors in academic subjects, since among them only three had General College percentile averages above 65, and the other five fell somewhere below that level. These students achieved their degrees in about the same length of time as the others (except for the three in the 55 to 64 percentile range), and their ability scores do not present what can be called a pattern, perhaps because the total number is too small. (See Table 34.)

Table 34
Men degree students in Secondary Education (skills[a]), originally registered in the General College

GC %ile	N	Qtrs in GC	Qtrs in OC[b]	Total Qtrs	CAR (mean)	Coöp (mean)	Honors or Grad School
85-100	1	3.0	10.0	13.0	29.0	1.0	---
75-84	0	---	---	----	----	----	---
65-74	2	3.0	10.0	13.0	41.0[c]	28.0[d]	---
55-64	3	6.7	8.3	15.0	26.0	33.5[e]	---
-54	2	6.0	7.5	13.5	23.5	5.0[f]	---

[a] Skills = music and art.
[b] OC = other colleges than the General College.
[c] There was no CAR for one student in this group.
[d] There was no Coöp score for one student in this group.
[e] There was no Coöp score for one student in this group.
[f] There was no Coöp score for one student in this group.

Another small group is comprised of men who earned degrees in Elementary Education. All six of these students achieved averages above 65 in the General College: three between 65 and 74, and three between 75 and 84. But those with the higher percentile average had lower ability scores, and the two groups of three finished college in very nearly the same period of time. Again the numbers are too small to form a significant pattern, but it is true even so that for these students also the percentile averages are above the cut-off point for transfer and probably were as good a means as any other of foretelling success. (See Table 35.)

Table 35
Men degree students in Elementary Education,[a]
originally registered in the General College

GC %ile	N	Qtrs in GC	Qtrs in OC[b]	Total Qtrs	CAR (mean)	Coöp (mean)	Honors or Grad School
85-100	0	---	---	----	----	----	---
75-84	3	4.0	8.3	12.3	31.0	16.0	1 in Grad School
65-74	3	5.3	7.7	13.0	36.0[c]	11.0	---
55-64	0	---	---	----	----	----	---
-54	0	---	---	----	----	----	---

[a] Including one student who earned his B.S. elsewhere than at the University of Minnesota and who is now in graduate school.

[b] OC = other colleges than the General College.

[c] There was no CAR for one student in this group.

Of the fourteen men who won degrees in Industrial Education, all but three possessed General College percentile averages above 65. Moreover, as the percentile average descended, the number of quarters required to complete the degree ascended, although ability scores show no such reasonable consistency. The one person whose percentile average fell in the highest bracket also possessed the highest CAR (42) and Coöp score (34), but two of the three in the lowest bracket of percentile averages presented the next highest mean CAR (30.5) and mean Coöp score (7.5), so that no really firm inferences can be drawn from the ability scores here. (See Table 36.)

Table 36
Men degree students in Industrial Education,
originally registered in the General College

GC %ile	N	Qtrs in GC	Qtrs in OC[a]	Total Qtrs	CAR (mean)	Coöp (mean)	Honors or Grad School
85-100	1	3.0	9.0	12.0	42.0	34.0	---
75-84	4	4.8	8.2	13.0	28.8	5.8	---
65-74	6	4.7	8.3	13.0	13.8[b]	3.2[c]	---
55-64	3	5.3	9.0	14.3	30.5[d]	7.5[e]	---
-54	0	---	---	----	----	----	---

[a] OC = other colleges than the General College.

[b] There was no CAR for two students in this group.

[c] There was no Coöp score for one student in this group.

[d] There was no CAR for one student in this group.

[e] There was no Coöp score for one student in this group.

Twenty-three men completed degrees with a major in Physical Education. Eleven of these had General College percentile averages above the 65 usually required for transfer,[6] six of the eleven above 75. The other twelve fell below 65, five of those at 54 or lower. On the whole, the better students spent somewhat more than four years (median quarters) in college, but the five in the lowest bracket required more than five years (median quarters) to complete their degrees. Two of the Physical Education majors were graduated with distinction, and three subsequently registered for study in the Graduate School at the university. (See Table 37.)

Table 37
Men degree students in Physical Education, originally registered in the General College

GC %ile	N	Qtrs in GC	Qtrs in OC[a]	Total Qtrs	CAR (mean)	Coöp (mean)	Honors or Grad School
85-100	2	4.5	8.0	12.5	24.0[b]	1.0[c]	---
75-84	4	4.5	9.8	14.2	21.0	13.3[d]	1 in Grad School 1 with dist.
65-74	5	6.4	8.4	14.8	18.5[e]	5.2[f]	1 in Grad School
55-64	7	4.9	9.0	13.9	23.8	19.8	1 in Grad School 1 with dist.
-54	5	6.2	9.4	15.6	17.0	11.0	---

[a] OC = other colleges than the General College.
[b] There was no CAR for one student in this group.
[c] There was no Coöp score for one student in this group.
[d] There was no Coöp score for one student in this group.
[e] There was no CAR for one student in this group.
[f] There was no Coöp score for one student in this group.

The largest number of men to receive degrees from the College of Education, thirty in all, were enrolled in Recreational Leadership. Here the pattern changes sharply from that of the students in other specializations, for now only eleven (thirty-seven per cent of the total) are found to have earned General College percentile averages above 65, three of these between 75 and 84. The other nineteen fall below the crucial 65, eleven of them to 54 or even lower. These students spent a longer time, on the whole, in the General College and required perhaps a little longer to complete degrees than did the students in the other groups. But their ability scores fall more conveniently into a pattern than do similar scores for the other groups: here the aptitude indicators descend in almost the same fashion as the General College percentile averages. However, from the ranks of the majors in Recreational Leadership did emerge two Master of Education degrees and one Bachelor of Science with distinction. (See Table 38.)

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[6] This requirement is sometimes waived by the College of Education under special circumstances and in certain programs.

Table 38
Men degree students in Recreational Leadership,[a]
originally registered in the General College

GC %ile	N	Qtrs in GC	Qtrs in OC[b]	Total Qtrs	CAR (mean)	Coöp (mean)	Honors or Grad Schcol
85-100	0	---	---	----	----	----	---
75-84	3	5.3	8.0	13.3	30.3	27.7	---
65-74	8	6.6	8.4	15.0	22.4	14.1	---
55-64	8	6.6	7.3	13.9	19.1	14.3	1 M.Ed. 1 with dist.
-54	11	6.5	7.5	14.0	17.3[c]	5.0[d]	---

[a] Including one student who earned his B.S. elsewhere than at the University of Minnesota.

[b] OC = other colleges than the General College.

[c] There was no CAR for three students in this group.

[d] There was no Coöp score for three students in this group.

Women:
As was said in the first paragraph of this chapter, sixty-four women who had at first been registered in the General College transferred eventually, either directly or via the S.L.A. college, to the College of Education: forty-five received degrees, eighteen withdrew, and one was dropped for lew scholarship. (See Table 27.) Within the degree group, seven had majors distributed among Spanish (1), speech (1), music (1), art (3), and Nursing Education (1), which have been entered on the following table, somewhat arbitrarily perhaps, as "secondary education" majors in order that they might be kept separate from three other specializations: Elementary Education (17), Nursery-Kindergarten-Primary (8), and Recreational Leadership (13). The students in the secondary education group earned a General College average of 76, several points above the averages of the other three groups who had 72 (for Elementary Education), 68 (for Nursery-Kindergarten-Primary), and 62 (for Recreational Leadership). The mean percentile average (69) for all the women was pulled downward somewhat, no doubt, by the mean 62 General College percentile average of the thirteen people in Recreational Leadership. Also, it should be noted that the thirty-eight students who made up the last three categories completed their degree in twelve quarters (median), commonly considered to be customary, and that the seven in the so-called secondary education programs required a somewhat longer time, though not a full year more. (See Table 39.)

Table 39
Majors, number, per cent, General College percentile average, and median quarters spent on degree for women students originally registered in the General College and transferred to the College of Education

Major	N	%	GC %ile Average	Median Quarters Spent on Degree
Spanish	1	2	82	14
Speech	1	2	65	14
Music	1	2	80	16
Art	3	7	77	12
Nursing Ed.	1	2	71	12
Total Academic	7	15	76	14
Elem. Ed.	17	38	72	12
NKP[a]	8	18	68	12
Recreation Lead.	13	29	62	12
Total	45	100.0	69	

[a] Nursery-Kindergarten-Primary.

An examination of the ability scores for the women reveals that the degree students in subject matter majors including those in academic programs, those in Elementary Education, and those in Nursery-Kindergarten-Primary, were, except for a very small difference in mean HSR, four to five points above the degree students in Recreational Leadership, and that the General College percentile average of the former group (72 percentile) surpassed that of the latter group by ten points (62 percentile). As is true of students who transferred to all colleges, the women who withdrew from the College of Education possessed ability scores and General College percentile averages very close to those of the women degree students. Since only one woman was dropped for low scholarship, the figures shown in that part of the table are not significant. (See Table 40.)

Table 40
Mean ability scores of women students originally registered in the General College and transferred to the College of Education

	N	HSR	ACE	Coöp	CAR	GC %ile
Subject Matter	32	40	18	38	30	72
Recreation Lead.	13	41	13	34	25	62
Total Degree	45	40	16	37	29	69
Withdraw	18	38	24	38	31	71
Dropped	1	46	23	1	35	60
Total	64	40	18	37	30	69

Duration of residence at the university is about identical, twelve quarters (median), for women in both subject matter fields and Recreational Leadership. However, those in the first-named category spent less time, four quarters (median), in the General College than did the latter group who were enrolled in the General College for six quarters (median). Those who withdrew, eighteen women, spent the same number of quarters (four, median), in the General College as did the degree students, but left the university after a total of eight quarters (median). Again, the one woman who was dropped can be considered only as an individual, not as a typical unsuccessful transfer student. (See Table 41.)

Table 41
Quarters spent in college by women students originally registered in the General College and transferred to the College of Education

	Quarters in GC			Quarters in OC[a]			Total Quarters		
	Q1	M	Q3	Q1	M	Q3	Q1	M	Q3
Subject Matter	3	4	6	6	7	9	12	12	13
Recreation Lead.	6	6	7	5	6	8	12	12	13
Withdraw	3	4	6	2	3	4	7	8	9
Dropped[b]	-	3	-	-	3	-	--	6	--

[a] OC = other colleges than the General College.

[b] One woman student was dropped.

Of the thirty-two women who earned subject-matter degrees (academic majors, Elementary Education, and Nursery-Kindergarten-Primary), six (nineteen per cent) also had been awarded the Associate in Arts degree in the General College, whereas of those in Recreational Leadership, five (thirty-eight per cent) had A.A. degrees. In this connection, however, one should keep in mind the fact that the subject matter majors spent only four quarters (median) in the General College and that, on the other hand, the Recreational Leadership people were there for six quarters (median), which period of residence provides the time necessary for an A.A. to be earned. Four other women, twenty-three per cent of those who withdrew, had also been awarded the Associate in Arts degree. Of all the women who transferred to education programs, in fact, fifteen (twenty-three per cent) were holders of A.A.'s. (See Table 42.)

Table 42
Women students originally registered in the General College who received the A.A. degree and also transferred to the College of Education

	Total N	N of AA	% of Total
Subject Matter	32	6	19%
Recreation Lead.	13	5	38%
Total Degrees	45	11	24%
Withdraw	18	4	23%
Dropped	1	-	0
Total	64	15	23%

Some study of the ability scores and General College percentile averages in relation to length of residence in the General College leads to an inference that the better women students in terms of General College performance transfer at the end of one year, but that for the subject matter majors the ability scores do not have the same relation to length of residence in the General College before transfer. However, for the majors in Recreational Leadership, both measurements of college potential are higher for the one-year people than for the two-year students, though it must be said that only two women make up the former group, probably too few to be taken really seriously. On the other hand, the performance of withdrawals, evenly distributed between the one-year and two-year categories, tends to confirm the tentative generalizations made at the beginning of this paragraph. (See Table 43.)

Table 43
Residence in General College, ability scores, and General College percentile averages of women students originally registered in the General College and transferred to the College of Education

Subject Matter Degrees

Residence in GC	N	HSR	ACE	Coöp	CAR	GC %ile
1 year	14	36	17	37	27	76
More than 1 year	18	39	20	39	29	69
Total	32					

Recreation Leadership Degrees

Residence in GC	N	HSR	ACE	Coop	CAR	GC %ile
1 year	2	74	15	55	45	74
More than 1 year	11	35	12	29	23	60
Total	13					

Withdraw

Residence in GC	N	HSR	ACE	Coöp	CAR	GC %ile
1 year	9	45	22	43	34	70
More than 1 year	9	31	24	36	35	64
Total	18					

Dropped

Residence in GC	N	HSR	ACE	Coöp	CAR	GC %ile
1 year	1	46	23	1	35	60
More than 1 year	--	--	--	--	--	--
Total	1					

The following tables represent an effort to relate General College performance to total achievement, on admittedly shaky ground as far as sheer numbers are concerned. Few, if any, fixed judgments are possible on the basis of the tables and figures, but certain observations are of interest, at least.

For instance, the seven women who majored in what were earlier classified, for the sake of categorization, as academic subjects, are scattered over the range of General College percentile averages: 85-100 (1), 75-84 (3), 65-74 (2), and 55-64 (1). Moreover, their major areas are even more widely dispersed than their averages so that no serious comment can be made about relationships between General College performance and major subjects. But except for one student, all of these had CAR's between 30 and 39 (fairly high for General College students), and excluding only one (ironically, the young woman who majored in Spanish!), higher than average verbal ability is indicated by their Coöp scores. There is relatively little difference in the length of time required for completing their college work since the number of quarters ranges from four years (three students) to five years (one student). (See Table 44.)

Table 44
Women degree students in academic subjects,
originally registered in the General College

GC %ile	N	Qtrs in GC	Qtrs in OC[a]	Total Qtrs	CAR (mean)	Coöp (mean)	Major
85-100	1	6.0	6.0	12.0	38.0	39.0	Art
75-84	1	3.0	10.0	13.0	33.0	39.0	Music
	1	3.0	10.0	13.0	36.0	2.0	Spanish
	1	7.0	8.0	15.0	33.0	68.0	Art
65-74	1	2.0	10.0	12.0	31.0	31.0	Nursing Ed.
	1	7.0	7.0	14.0	39.0	58.0	Speech
55-64	1	6.0	6.0	12.0	23.0	47.0	Art
-54	0	---	---	----	----	----	

[a] OC = other colleges than the General College.

Another relatively small and, therefore, probably statistically insignificant group is made up of the eight women who completed degrees in the Nursery-Kindergarten-Primary curriculum. These were divided half and half between the 65-84 bracket and the 55-64 bracket for General College percentile averages. They all finished school in four years or just slightly over, though the better students achieved transfer sooner than did the others. There are only about four points of variation in the mean CAR's for these students, but their mean Coöp scores correspond to their General College percentile averages in that as the percentile average drops, the Coöp score does likewise. (See Table 45.)

Table 45
Women degree students in Nursery-Kindergarten-Primary,
originally registered in the General College

GC %ile	N	Qtrs in GC	Qtrs in OC[a]	Total Qtrs	CAR (mean)	Coöp (mean)	Honors or Grad School
85-100	0	---	---	----	-----	----	---
75-84	2	3.0	9.5	12.5	30.5	71.0	---
65-74	2	4.5	8.0	12.5	32.0[b]	59.0	---
55-64	4	5.5	6.8	12.2	27.5	29.0	---
-54	0	---	---	----	----	----	---

[a] OC = other colleges than the General College.

[b] There was no CAR for one student in this group.

The women who completed degrees in Elementary Education represent the largest and probably the most significant group statistically of those who transferred to the College of Education. Of these seventeen students, thirteen had General College percentile averages above 65, seven of them in the 65-74 range, and the other six in the bracket between 75 and 100. Only three fell in the category between 55 and 64, and just one had a percentile average below 54. Excluding the two students in the 85-100 range and the one who stood lowest, the degree women in Elementary Education stayed longer in the General College as the level of their percentage averages went down, but the entire group completed college work in much the same length of time, varying only from twelve quarters (median) to 13.3 quarters (median). The mean CAR's present no real pattern of relationship to other measures. Paradoxically, the student with the lowest General College percentile average possessed the highest CAR (55), though she proved, too, to have the lowest Coöp score (25). Since so many of these students had a General College percentile average of 65 or higher and since the other ability indicators are scattered and patternless, perhaps a guess might be hazarded that performance in General College courses is as good a predictor of success as advisers have at hand for students who wish to major in Elementary Education. (See Table 46.)

Table 46
Women degree students in Elementary Education, originally registered in the General College

GC %ile	N	Qtrs in GC	Qtrs in OC[a]	Total Qtrs	CAR (mean)	Coöp (mean)	Honors or Grad School
85-100	2	5.0	8.0	13.0	30.5	46.5	---
75-84	4	3.5	9.0	12.5	28.8	34.0	---
65-74	7	4.3	9.0	13.3	21.3[b]	26.9	---
55-64	3	6.0	6.3	12.3	26.7	35.0	---
-54	1	6.0	6.0	12.0	55.0	25.0	---

[a] OC = other colleges than the General College.

[b] There was no CAR for one student in this group.

The final group is composed of thirteen women who majored in Recreational Leadership. Here the picture is quite different from that of the other groups just discussed. For example, only three of the thirteen had General College percentile averages above 65, and ten fell at 64 or even lower. As a matter of fact, the largest single division is made up of six students, nearly half of the total, who transferred with percentile averages of 54 or below. Although the two best students spent only four quarters in the General College, all the others were in residence there a full two years (median); yet the group as a whole varied little in total length of time in residence at the university, ranging from twelve quarters (median) to 13.5 quarters (median). Little can be said about ability scores except that the three students with the highest General College percentile averages also had CAR's and mean Coöps considerably superior to those of the rest. One woman who received a degree in Recreational Leadership was graduated from the College of Education with distinction. (See Table 47.)

Table 47
Women degree students in Recreational Leadership,
originally registered in the General College

GC %ile	N	Qtrs in GC	Qtrs in OC[a]	Total Qtrs	CAR (mean)	Coöp (mean)	Honors or Grad School
85-100	2	4.0	9.5	13.5	42.0	60.5	---
75-84	1	6.0	6.0	12.0	36.0	53.0	1 with dist.
65-74	0	---	---	----	----	----	---
55-64	4	6.0	6.0	12.0	22.0	20.7	---
-54	6	6.0	6.8	12.8	23.0	27.8[b]	---

[a] OC = other colleges than the General College.

[b] There was no Coöp score for one student in this group.

Some conclusions:

An over-all look at the picture presented by General College students who transferred to the College of Education reveals a certain scattering of levels of ability scores among the various individual groups of majors, but higher ability scores for the subject matter students (both men and women) than for those in Physical Education and Recreational Leadership. The General College percentile average emerges as possibly the best single predictor of success after transfer for General College students who wish to become teachers since such a high proportion of those who achieved four-year degrees had earned percentile averages above the cut-off point of 65. The only exception to the last statement is made in the case of majors in Recreational Leadership, for whom performance in the classroom does not appear to be an important criterion for success. As regards length of residence in college, there is not much difference between the two groups, subject matter and Recreational Leadership.

It seems clear that those who withdrew were not necessarily poorer students than those who completed degrees since their mean ability scores, General College percentile average, and length of residence in the General College (the better students transfer earlier than the others, as a general rule) are very close to those of the degree students. Despite the fact that those who withdrew had a percentile average of 62 as compared with the mean 68 of the degree students, withdrawal apparently involves other factors besides scholarship, an observation which may be borne out by the differences, not between ability scores, but between General College percentile averages of those who earned degrees, those who withdrew, and those who were dropped. There is a descending scale here from 68 (for graduates) to 62 (for withdrawals) to 51 (for those who were dropped by the university), and the 51 is clearly lower than the others and much lower than the 65 which represents the percentile average achieved by all of the transfers to the College of Education.

3. The School of Business Administration

A total of 118 General College men, no women, transferred to the School of Business Administration with what was perhaps unexpected success. Of this number, seventy-seven (sixty-five per cent) received the B.B.A. degree, thirty (twenty-six per cent) withdrew, and only eleven (nine per cent) were dropped for low scholarship. (See Table 48.)

Table 48
Students[a] who originally registered in the General College and transferred to the School of Business Administration

	N	%
Degree	77	65
Withdraw	30	26
Dropped	11	9
Total	118	

[a] Only men students transferred to the School of Business Administration.

Among the graduates, by far the greatest number of degrees was earned by students who majored in General Business (forty-eight per cent) and the next highest number by those who specialized in Accounting (twenty-three per cent). There followed, in order of frequency, Industrial Relations (ten per cent), Insurance (six per cent), Merchandising and Selling (six per cent), Transportation and Traffic Management (four per cent), and Foreign Trade, Retail Store Training, and Factory Management (each one per cent). The General College percentile average for the entire degree group was 75, ten points above the requirement for transfer, with a spread between areas of specialization from a low of 73 to a high of 93. (See Table 49.) Students who earned degrees in the School of Business Administration spent thirteen quarters (median) to complete their degrees, with only one student (the single major in Foreign Trade) requiring as many as seventeen quarters to finish his course, so that the length of time used for completion of college work was not excessive.[7] (See Table 50.)

Table 49
Majors, number, percent, General College percentile average, and median quarters spent on degree for students originally registered in the General College and transferred to the School of Business Administration

Major	N	%	GC %ile Average	Median Quarters Spent on Degree
General Business	37	48	74	12
Accounting	18	23	73	14
Ind. Relations	8	10	79	13
Insurance	4	6	77	13
Merchandising	4	6	84	12
Traffic-Trans.	3	4	79	12
Foreign Trade	1	1	93	17
Retail Store	1	1	90	12
Factory M'g'm't.	1	1	78	12
Total	77		75	13

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[7] Various studies in the past have indicated that only about twenty-five per cent of students who earn degrees at the university complete the work in four years.

Table 50
Quarters spent in college by students originally registered in the General College and transferred to the School of Business Administration

	Quarters in GC			Quarters in Other[a]			Total Quarters		
	Q1	M	Q3	Q1	M	Q3	Q1	M	Q3
Degree	3	3	6	7	9	10	12	13	14
Withdraw	3	4	6	7	8	9	11	12	13
Dropped	5	6	7	2	6	7	8	12	15

[a] For most students this total would involve at least one quarter, often more, spent in the College of Science, Literature, and the Arts prior to transfer to the School of Business Administration.

For the entire group transferred to the School of Business Administration, the mean CAR for degree students (29) is five points higher than for those who withdrew (24) and only three points above that of those who were dropped for low scholarship (26)—though it should be noted carefully here that the number of students who were dropped is very low compared with the numbers of those who earned degrees and those who withdrew—and the mean CAR for the entire transfer group is 28. Here, as elsewhere, the degree students exhibit a somewhat higher mean score (18) on the Coöp than do the withdrawals (15) and the drops (12). But the most striking difference lies between the General College percentile average of the degree students (75) and of the withdrawals (73) and that of those who were dropped for low scholarship (63). It seems apparent that performance in the General College program is a fairly good predictor of ultimate success, since withdrawal from the university may come as a result of various personal and environmental factors as much as from a premonition of academic failure and need not be regarded as an indication that failure was imminent or even probable. (See Table 51.)

Table 51
Mean ability scores of students originally registered in the General College and transferred to the School of Business Administration

	N	HSR	ACE	Coöp	CAR	GC %ile
Degree	77	34	23	18	29	75
Withdraw	30	26	22	15	24	73
Dropped	11	27	25	12	26	63
Total	118	32	22	18	28	74

If one notes that the typical degree student spent three quarters (median) and the typical withdrawal four quarters (median) before transferring to the S.L.A. college and then to the School of Business Administration, he does not find it surprising that only seventeen per cent of those who earned degrees and a like per cent of those who withdrew earned the A.A. degree (which requires ninety credits) in the General College. However, for the eleven who were dropped for low scholarship, the number of A.A. degrees rises sharply to sixty-four per cent, and reasonably so since those men spent six quarters (median) or even longer in the General College. (See Table 52.)

Table 52
Students originally registered in the General College who received the A.A. degree and also transferred to the School of Business Administration

	Total N	N of A.A.	% of N
Degree	77	13	17
Withdraw	30	5	17
Dropped	11	7	64
Total	118	23	19

From another set of figures and another table, it becomes clear that the total number of degrees is divided about half and half as regards residence in the General College, thirty-eight students staying for one year and thirty-nine for a longer period. The mean CAR for these two groups is about identical (29 and 28), but there is a little wider spread in the mean Coöp scores (21 for those who transferred after one year, 16 for the others). However, the most significant difference is once again the General College percentile average, where those who transferred sooner had a mean rank of 80, and the others had a mean of 69. (See Table 53.)

Among those who withdrew, twelve had been in the General College for one year, and eighteen for a longer time. The mean HSR for these students (26) is considerably lower than for the degree students (35), although little difference exists in the mean Coöp scores (19 for degrees and 15 for withdrawals) or on the CAR (29 for degrees and 24 for withdrawals) and virtually none on the ACE (23 and 22). However, again a wide spread occurs in the area of the General College percentile average, where a mean rank of 79 exists for those withdrawals with one year of residence and of 69 for those with more. Furthermore, there are only two points of difference between the degree students and the withdrawals as regards percentile ranks, suggesting once more that withdrawals from college must be attributed in part to other reasons than academic difficulty. (See Table 53.)

All of the students who were dropped for low scholarship had attended the General College for more than one year, and while their ability scores are very much like those of the students who withdrew and somewhat lower than those of the degree students, their considerably lower percentile average (63), even below the usual cut-off point for transfer, probably tells the story. (See Table 53.)

Table 53
Residence in General College, ability scores, and General College percentile average of students originally registered in the General College and transferred to the School of Business Administration

Degree

Residence in GC	N	HSR	ACE	Coöp	CAR	GC %ile
1 year	38	36	21	21	29	80
More than 1 year	39	34	24	16	28	69
Total degree	77	35	23	19	29	75

Withdraw

Residence in GC	N	HSR	ACE	Coöp	CAR	GC %ile
1 year	12	26	25	14	25	79
More than 1 year	18	26	20	16	23	69
Total withdraw	30	26	22	15	24	73

Drop

Residence in GC	N	HSR	ACE	Coöp	CAR	GC %ile
1 year	0	---	--	--	--	--
More than 1 year	11	27	25	12	26	63
Total drop	11	27	25	12	26	63

The following four tables describe the General College performance as well as the ability scores of students who won degrees in the various areas of the School of Business Administration. For example, of those who majored in General Business, the greatest number earned General College percentile averages of 65 or above, and half of those students had averages of 75 or higher. These better students spent less time in the General College than did the other quarter of the group, but required very nearly the same length of time to complete their degrees, though some finished within the traditional twelve quarters. Except for the mean CAR of 20 on the record of the three whose General College percentile rank is 54 or lower, the CAR's are about the same for the entire group. Paradoxically, the Coöp score for those whose percentile averages fall between 85 and 100 is considerably lower (20.9) than for those whose averages are below the 65 to 84 bracket (28.6 and 29.4). But those who presented the poorest General College record also did most poorly with the Coöp -- the 55 to 64 group making a mean Coöp score of 10, and the 54 and lower group making only a 6 on the Coöp. It should be added, perhaps even with conscious contrast, that one student with a major in General Business was graduated with distinction. (See Table 54.)

Table 54
Degree students in General Business,
originally registered in the General College

GC %ile	N	Qtrs in GC	Qtrs in OC[a]	Total Qtrs	CAR (mean)	Coöp (mean)	Honors or Grad School
85-100	9	3.2	9.1	12.3	32.0[b]	20.9[c]	---
75-84	9	3.9	8.8	12.7	33.4	28.6	---
65-74	10	4.2	9.1	13.3	30.6	29.4[d]	1 with dist.
55-64	6	6.2	7.5	13.7	30.2	10.0	---
-54	3	6.0	7.0	13.0	20.0[e]	6.0	---

[a] OC = other colleges than the General College.

[b] There was no CAR for two students in this group.

[c] There was no Coöp score for two students in this group.

[d] There was no Coöp score for one student in this group.

[e] There was no CAR for one student in this group.

Of the eighteen who specialized in Accounting, fourteen students earned General College percentile averages above 65, and the averages of eleven were 75 or higher. Again, the better students transferred earlier than did the others from the General College, and here the top eleven students finished their degrees in the prescribed twelve quarters or only a little longer. Somewhat surprisingly, the students with the lowest General College percentile averages produced the highest mean CAR (less than two points above that of those in the top bracket, however), and their mean Coöp score was not the lowest either. A single graduate finished his degree in Accounting with distinction. (See Table 55.)

Table 55
Degree students in Accounting,
originally registered in the General College

GC %ile	N	Qtrs in GC	Qtrs in OC[a]	Total Qtrs	CAR (mean)	Coöp (mean)	Honors or Grad School
85-100	4	3.0	9.0	12.0	29.0	15.8	---
75-84	7	3.8	8.7	12.5	28.2[b]	20.3	1 with dist.
65-74	3	6.0	7.7	13.7	27.3	8.3	---
55-64	0	---	---	----	----	----	---
-54	4	6.0	8.5	14.5	31.7[c]	12.3	---

[a] OC = other colleges than the General College.

[b] There was no CAR for one student in this group.

[c] There was no CAR for one student in this group.

Eight persons graduated from courses in Industrial Relations, seven of them with General College percentile averages at 65 or higher, and six of those seven with averages above 75. Two of the six went on eventually to achieve the Master of Arts degree in the Graduate School of the University of Minnesota. Again the better students, i.e., those with percentile averages above the cut-off point of 65, required less time than the others to complete their college work (12 to 13 quarters), although the college ability scores for the entire group appear to have little relation to their success. However, it is perhaps of some import to note that among the four students who had General College percentile averages between 75 and 84, the mean Coöp score is relatively high in terms of General College students and that the two M.A. degrees were achieved by students with this better performance on the Coöp (24.8). (See Table 56.)

Table 56
Degree students in Industrial Relations,
originally registered in the General College

GC %ile	N	Qtrs in GC	Qtrs in OC[a]	Total Qtrs	CAR (mean)	Coöp (mean)	Honors or Grad School
85-100	2	3.0	9.0	12.0	20.0[b]	11.5	---
75-84	4	3.3	9.8	13.0	33.8	24.8	2 M.A.
65-74	1	5.0	8.0	13.0	25.0	1.0	---
55-64	1	6.0	9.0	15.0	33.0	23.0	---
-54	0	---	---	----	----	----	---

[a] OC = other colleges than the General College.

[b] There was no CAR for one student in this group.

Finally, fourteen students earned degrees in a variety of business fields: Insurance (4), Merchandising and Selling (4), Transportation and Traffic Management (3), Foreign Trade (1), Retail Store Management (1), and Factory Management (1). Although these students spent more than one year of residence (median) in the General College, their percentile averages in the college were all above 65, most of them above 75; moreover, they all finished their college work in only a little more than twelve quarters (median). Inexplicably enough, the ability scores -- both the mean CAR and the mean Coop -- run in opposite order to performance in the General College. (See Table 57.)

Table 57
Degree students in other business fields,[a] originally registered in the General College

GC %ile	N	Qtrs in GC	Qtrs in OC[b]	Total Qtrs	CAR (mean)	Coöp (mean)	Honors or Grad School
85-100	3	4.0	8.3	12.3	17.0[c]	5.3	---
75-84	9	3.4	9.3	12.7	22.9[d]	13.8	---
65-74	2	4.5	8.0	12.5	33.0	34.0	---
55-64	0	---	---	----	----	----	---
-54	0	---	---	----	----	----	---

[a] Insurance (4), Merchandising (4), Traffic-Transportation (3), Foreign Trade (1), Retail Store (1), Factory Management (1).

[b] OC = other colleges than the General College.

[c] There was no CAR for one student in this group.

[d] There was no CAR for one student in this group.

With the above evidence _in toto_, it would appear that students who registered originally in the General College and then transferred, most of them _via_ the S.L.A. college, to the School of Business Administration proved to be a credit to themselves and indirectly perhaps to the General College faculty advisers and counselors who helped them. For most of them, the single most reliable indicator -- not always infallible, to be sure -- appears to be the students' performance during their stay in the General College, with the score on the Coöperative English Test also something of a factor. Certainly, the results here serve mildly to question the assertion that students who enter the College of Science, Literature, and the Arts and then transfer to a professional school, earning degrees there, are "almost exclusively from the upper 25 per cent of their high school graduating classes."[8] A fairly high proportion of these apparently inferior high school students have joined the "exclusive" number mentioned in the foregoing statement, despite the fact that these General College students had a mean HSR of 34. Moreover, their mean ACE of 23 is also an exception, this time to the observation that University of Minnesota graduates of the professional schools rank above the middle of the freshman class in ability.[9] However tentatively they may have started their college careers, at whatever lowly rank in their high school graduating class or freshman class at the university, this particular group of General College students were eminently successful in achieving their academic goals. Moreover, their number is large enough so that their experience and their example may well prove useful to those who may try to help other aspiring students to make an educational choice or find a vocational goal.

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[8] Cornelia T. Williams, _These We Teach_, p. 79.

[9] _Ibid_., p. 80.

4. The College of Agriculture, Forestry, and Home Economics

During the five-year period encompassed by this study, forty-five students who had registered originally in the General College transferred to the College of Agriculture, Forestry, and Home Economics: forty men and five women. (See Table 58.)

Table 58
Students who originally registered in the General College and transferred to the College of Agriculture, Forestry, and Home Economics, showing number and per cent of degrees, withdrawals, and drops

	Men		Women	
	N	%	N	%
Degree	13	33	1	20
Withdraw	26	65	4	80
Dropped	1	2	0	0
Total	40		5	

Of the men, thirteen (thirty-three per cent) finally earned four-year degrees in nine different fields: two in Agricultural Business Administration, two in Dairy Industries, two in Fishery and Wildlife Management, two in Forest Resources Management, and one each in Agricultural Education, Agronomy, Dairy Husbandry, Plant Industry, and Soils. Of the women, one (twenty per cent) won a degree in Home Economics. (See Table 59.)

Table 59
Majors, number, per cent, General College percentile average, and median quarters spent on degree for men[a] students originally registered in the General College and transferred to the College of Agriculture, Forestry, and Home Economics

	N	%	GC %ile Average	Median Quarters Spent on Degree
Ag. Business	2	15	74	13
Ag. Education	1	8	97	12
Agronomy	1	8	70	16
Dairy Husbandry	1	8	72	12
Dairy Industry	2	15	78	15
Fish & Wildlife	2	15	70	15
Forestry	2	15	66	16
Plant Industry	1	8	64	13
Soils	1	8	94	14
Total	13			

[a] One woman student received a degree, in Home Economics; her General College percentile average was 62.

Because of the small number of degree students, it is not possible to generalize concerning what kind of student transfers to the College of Agriculture, Forestry, and Home Economics or to determine what kind of student, on the basis of anything but vocational interests and aptitudes, might be advised to go there. An examination of certain figures shows plainly that those men who earned four-year degrees presented a General College percentile average of 75 and a mean CAR of 33 (see Table 60), requiring a total of fifteen quarters (median) to complete the work on their degrees. (See Table 61.) However, evidence is equally clear that the twenty-six students who withdrew from the programs that they had elected (sixty-five per cent of the total number of transfers) had a mean General College percentile average of 73 -- only two points lower than that of the degree students -- and a mean CAR of 33 -- identical with that of the degree students. (See Table 60.) Those who withdrew remained in college a shorter time, naturally, staying for nine quarters (median) altogether. (See Table 61.)

Table 60

Mean ability scores and General College percentile averages of students originally registered in the General College and transferred to the College of Agriculture, Forestry, and Home Economics

			Men			
	N	HSR	ACE	Coöp	CAR	GC %ile
Degree	13	45	21	27	33	75
Withdraw	26	38	29	20	33	73
Dropped	1	11	5	15	8	42
Total	40	40	26	22	32	73

			Women			
	N	HSR	ACE	Coöp	CAR	GC %ile
Degree	1	19	36	75	28	62
Withdraw	4	59	32	53	46	75
Dropped	0	--	--	--	--	--
Total	5	51	33	57	42	72

Table 61

Quarters spent in college by men[a] students originally registered in the General College and transferred to the College of Agriculture, Forestry, and Home Economics

	Quarters in GC			Quarters in OC[b]			Total Quarters		
	Q1	M	Q3	Q1	M	Q3	Q1	M	Q3
Degree	3	4	5	9	10	11	13	15	16
Withdraw	2	3	6	3	4	6	6	9	10
Dropped	-	-	-	-	--	--	--	--	--

[a] The women were too few to be considered significant except as individuals.

[b] OC = other colleges than the General College.

The widest difference between the two groups occurs in the score on the Coöp, where degree students had a mean of 27 as against the 20 of those who withdrew, suggesting that verbal facility may give some advantage. (See Table 60.) Since only one student was dropped for low scholarship, his record cannot be regarded as significant or predictive in any way.

It seems appropriate to make some comments regarding the relation of these students' careers in the General College to their performance following transfer. For example, of the forty men who achieved admission to the College of Agriculture, Forestry, and Home Economics, three (twenty-three per cent) of those who earned degrees also won the Associate in Arts degree in the General College, five (nineteen per cent) of those who withdrew had been awarded the A.A., and the single student who was dropped had no A.A. on his transcript; also, of the five women who transferred, the single degree student had earned an A.A., and the four who withdrew had none. (See Table 62.)

Table 62
Students originally registered in the General College who received the A.A. degree and also transferred to the College of Agriculture, Forestry, and Home Economics

	Men			Women		
	N	N of AA	% of Total	N	N of AA	% of Total
Degree	13	3	23	1	1	100
Withdraw	26	5	19	4	0	0
Dropped	1	0	0	0	-	---
Total	40	8	20	5	1	20

In addition, six of the thirteen who earned degrees had spent one year or less in the General College, while the other seven had attended there for more than one year; and fifteen of the twenty-six who withdrew had attended the General College for one year or a shorter period of time, and the remaining ten had remained there for longer than one year. (See Table 63.) There appears to be little relation, on the basis of the above figures, between possession of the A.A. degree and success after transfer or between length of residence in the General College and achieving or not achieving a baccalaureate degree.

Table 63
Residence in General College, ability scores, and General College percentile averages of students originally registered in the General College who transferred to the College of Agriculture, Forestry, and Home Economics

		Men Degree Students				
Residence in GC	N	HSR	ACE	Coöp	CAR	GC %ile
1 year	6	42	28	28	36	76
More than 1 year	7	47	15	26	31	74
Total Degree	13					

		Men Withdrawn				
Residence in GC	N	HSR	ACE	Coöp	CAR	GC %ile
1 year	15	37	32	19	35	79
More than 1 year	10	38	23	21	30	64
Total Withdrawn	25					

		Men Dropped				
Residence in GC	N	HSR	ACE	Coöp	CAR	GC %ile
1 year	0	--	--	--	--	--
More than 1 year	1	11	5	15	8	42
Total Dropped	1					

		Women Degree Students				
Residence in GC	N	HSR	ACE	Coöp	CAR	GC %ile
1 year	0	--	--	--	--	--
More than 1 year	1	19	36	75	28	62
Total Degree	1					

		Women Withdrawn				
Residence in GC	N	HSR	ACE	Coöp	CAR	GC %ile
1 year	4	58	32	53	46	75
More than 1 year	0	--	--	--	--	--
Total Withdrawn	4					

No women students were dropped.

However, even granting that certain relationships do not appear to exist and that few students are involved, it may be observed that ten out of the thirteen who were awarded four-year degrees possessed a General College percentile average of 65 or above, and that four of those ten presented a percentile average between 85 and 100. Similarly, the CAR of the last-mentioned four students is appreciably higher (56) than the CAR of the others, so that General College performance and CAR, as well as the score on the Coöp (32 for these four students) may have some relation to success. (It should be noted that the one Coöp score of 60 belongs to only one student, who could not be termed representative of a group.) Furthermore, the single woman who earned a degree, in Home Economics, had a percentile average of 62, a CAR of 28, and a Coöp score of 75; again because she is only one person, she cannot be regarded as representative, nor can her scores be used predictively. (See Table 64.)

Table 64

Degree students in Agriculture,[a] Forestry,[b] and Home Economics,[c] originally registered in the General College

GC %ile	N	Qtrs in GC	Qtrs in OC[d]	Total Qtrs	CAR (mean)	Coöp (mean)	Honors or Grad School
85-100	4	4.0	9.0	13.0	56.0	32.0	---
75-84	1	2.0	10.0	12.0	33.0	18.0	---
65-74	5	4.6	9.6	14.2	19.0	4.0	---
55-64	2	3.0	10.3	13.0	26.0	26.0	---
-54	1	4.0	10.0	14.0	31.0	60.0	---

[a] Including Agricultural Business Administration (2), Agricultural Education (1), Agronomy (1), Dairy Husbandry (1), Dairy Industries (2), Soils (1), Plant Industry (1).

[b] Including Forest Resources Management (2), Fishery and Wildlife Management (2).

[c] One woman student, not included in the table, earned a degree in Home Economics. Her General College percentile average was 62; her CAR, 28; her Coöp score, 75.

[d] OC = other colleges than the General College.

In view of the small size of the transfer group and the still smaller divisions which result when degree students are considered separately from those who withdrew, no very definite lines can be drawn here. The most that can be said safely is that of the forty men and five women who did enter the College of Agriculture, Forestry, and Home Economics, fourteen did graduate with majors in a variety of fields. It would appear, however, that a percentile average fairly well above the required 65 in General College courses and an above-average mean CAR (in terms of General College students) for these degree students, almost identical with the percentile average and CAR of students who withdrew, reveal very little for the adviser's benefit. The figures, though interesting, serve to prove mainly that certain individuals have been successful to certain levels, but those figures do not say very much that could be regarded as significant in counseling students in the future who may desire to attempt work in agriculture, forestry, or home economics.

5. The Institute of Technology

Although almost twice as many students transferred to the Institute of Technology as to the College of Agriculture, Forestry, and Home Economics, the outcomes for those who aspired to be engineers was quite different than for the others. Seventy-seven men[10] made the transfer, in all: eleven (fourteen per cent) earned bachelor's degrees, fifty (sixty-five per cent) withdrew, and sixteen (twenty-one per cent) were dropped by the university for low scholarship. (See Table 65.)

Table 65

Students[a] who originally registered in the General College and transferred to the Institute of Technology

	N	%
Degree	11	14
Withdraw	50	65
Dropped	16	21
Total	77	100

[a] Only men transferred to the Institute of Technology.

The major areas represented by the eleven degree students are six in number: electrical engineering (five), aeronautical engineering (one), civil engineering (one), architectural engineering (one), mechanical engineering (two), and mining engineering (one). All of these men, except the one in civil engineering, had earned General College percentile averages well above the usual transfer level of 65, although the standard is not necessarily enforced by the Institute of Technology, which instead imposes certain prerequisites in mathematics for admission to its various programs. For the entire degree group, the mean percentile average, nonetheless, was 71, so that the men who were graduated as engineers had performed well in the General College, admission requirements notwithstanding. These men required seventeen quarters (median) to finish their degrees, but this total is not surprising if one recalls the fact that the engineering programs are five-year curricula. (See Table 66.)

Table 66

Majors, number, per cent, General College percentile average, and median quarters spent on degree for students originally in the General College and transferred to the Institute of Technology

Major	N	%	GC %ile Average	Median Quarters Spent on Degree
Elect. Eng.	5	46	74	17
Aero. Eng.	1	9	82	18
Civil Eng.	1	9	64	17
Arch. Eng.	1	9	79	15
Mech. Eng.	2	18	91	17
Mining Eng.	1	9	80	19
Total	11	100	71	17[a]

[a] The programs in the Institute of Technology are five-year curricula instead of the usual four for a bachelor's degree. The median quarters quoted here should be interpreted in such terms.

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[10] The figure includes seven who went into the Technical Aid program, at one time offered in the Institute of Technology, and who earned certificates in that curriculum. The two-year degrees are not counted among the degrees in this chapter, but the few who withdrew from the Technical Aid program are numbered among the fifty withdrawals from the Institute.

Among the ability scores, the mean HSR of 38 for the degree students can be singled out as higher than that of the men who withdrew (33) and of those who were dropped (25), although the mean ACE scores do not run in a corresponding order. The mean Coöp scores for both degree students (18) and withdrawals (18) are appreciably higher than for the ones who were dropped (10). But performance in the General College shows a somewhat different picture, for here the degree students were clearly the highest with 71, while the withdrawals and drops fell behind with 67 and 59 respectively. Even so, the mean percentile average for all three groups together (68) was above the crucial 65 usually locked upon as qualifying the student for transfer. (See Table 67.)

Table 67

Mean ability scores of students originally registered in the General College and transferred to the Institute of Technology

	N	HSR	ACE	Coöp	CAR	GC %ile
Degree	11	33	27	19	31	71
Withdraw	50	33	28	18	30	67
Dropped	16	26	22	11	23	59
Total	77	32	26	17	28	68

Students who transferred to I.T. -- whether degrees, withdrawals, or drops -- spent three quarters (median) in the General College before going on. The degree students then required seventeen quarters (median) to complete their college work, whereas the students who were dropped persisted a little longer time at the university (twelve quarters, median) than those who left of their own accord (ten quarters, median). (See Table 68.)

Table 68

Quarters spent in college by students originally registered in the General College and transferred to the Institute of Technology

	Quarters in GC			Quarters in IT			Total Quarters		
	Q1	M	Q3	Q1	M	Q3	Q1	M	Q3
Degree	3	3	3	15	15	15	17	17	18
Withdraw	3	3	4	2	4	9	7	10	12
Dropped	3	3	5	3	9	11	9	12	14

None of the men who earned engineering degrees had been awarded the Associate in Arts by the General College, but it must be remembered that they had spent only three quarters (median) in residence there and that to qualify for the A.A. they would have had to accumulate ninety credtis. Of those who withdrew, nine completed work on and were given the A.A. degree, and three of those who were dropped did likewise. (See Table 69.)

Table 69

Students originally registered in the General College who received the A.A. degree and also transferred to the Institute of Technology

	Total N	N of AA	% of N
Degree	11	0	0
Withdraw	50	9	18
Dropped	16	3	19
Total	77	12	16

Ten of the degree students spent just one year in the General College, and just one remained for longer than that. Those in the first group had a higher mean HSR and CAR than the one man in the second category, though his ACE was higher than their mean ACE and his Coöp score and theirs were identical. There was only one point between them in General College percentile average, also. Among the withdrawals, where the one-year and two-year groups are more nearly comparable in size, the one-year students have higher mean ability scores everywhere except in the Coöp, where the mean scores are the same; but the withdrawals who stayed in the General College for just one year had a clearly higher percentile average (71) than did those who remained for two years (60). In general, the mean ability scores of the students who were dropped are lower than for those who earned degrees or withdrew voluntarily, especially those of the people who stayed more than one year in the General College. Also, the General College percentile average of the five men who stayed the longer period of time in that college and then eventually were dropped is very low indeed (30), though paradoxically the mean percentile average of the one-year students who were dropped is higher (72) than any other in the entire group that transferred to I.T. (See Table 70.)

Table 70
Residence in General College, ability scores, and General College percentile average of students originally registered in the General College and transferred to the Institute of Technology

Degree Students

Residence in GC	N	HSR	ACE	Coöp	CAR	GC %ile
1 year	10	34	26	19	31	71
More than 1 year	1	21	33	19	27	70
Total degree	11	33	27	19	31	71

Withdraw

Residence in GC	N	HSR	ACE	Coöp	CAR	GC %ile
1 year	28	35	29	18	32	71
More than 1 year	22	30	27	18	29	60
Total withdraw	50	33	28	18	31	67

Dropped

Residence in GC	N	HSR	ACE	Coöp	CAR	GC %ile
1 year	11	28	30	14	28	72
More than 1 year	5	19	4	3	14	30
Total dropped	16	26	22	11	23	59

Despite the fact that the men who transferred to the Institute of Technology were admitted there largely because they had made up certain deficiencies in mathematics and not because they had achieved good records in the General College, it is quite evident that they were, on the whole, better than average students in the General College courses which they took. Though their ability scores were not high enough to predict that any of them could qualify for the five-year degrees which the Institute offers, eleven of these students, after getting a creditable start in the General College, pursued their courses to the end. Moreover, they finished work on these five-year degrees in seventeen quarters (median), counting their residence in the General College -- the man in architecture taking the shortest time (fifteen quarters) and the man in mining engineering requiring the longest (nineteen quarters). One notably successful record is that of the student who was graduated with high distinction, one of two in the entire transfer population to win such an honor. Even though enthusiasm may be tempered somewhat by knowledge that sixty-five per cent of the transfers to the Institute of Technology withdrew and that twenty-one per cent were dropped for low scholarship, the figures give concrete evidence that some General College men -- "late bloomers" perhaps, with considerable tenacity and strong motivation -- are able to qualify for degrees in engineering.

IV. STUDENTS WHO TRANSFER TO THE GENERAL COLLEGE

The second major segment of the transfer population to be considered in this study is made up of young men and women who did not enroll originally in the General College, but who registered there after attending another of the several colleges within the university itself or some college elsewhere. Generally, these students had been admitted to one of the other colleges at the university on the basis of their College Aptitude Rating (CAR), which, as has been noted earlier, must be a score of 40 or higher derived as an average of their High School Rank (HSR) and their score on the American Council on Education Psychological Examination (ACE);[1] or they had registered at some private college, state college, or junior college under whatever admissions regulations that institution had established. By and large, such students had come to the General College for one of two reasons: either they had not been making normal progress toward a degree in the college of the university where they had initially been registered and so were unable to continue there, or they had come to the university with an academic record too low to qualify them for admission to one of the four-year colleges of the university. For both groups, the General College represented an opportunity to complete their education with the Associate in Arts degree or to rethink their educational goals and regroup their forces for eventual transfer back to the college from which they came or to another college where they might make a fresh start.

During the period covered by this study, 1951-1956, 303 students who had not originally been registered in the General College and had come there to try again achieved transfer to some other college within the university. Within this group, there were 244 men and fifty-nine women. Among the men, almost the same number, 111 (45.5 per cent), won degrees as withdrew (107, or 43.8 per cent), and only twenty-six (10.7 per cent) were dropped for low scholarship; for the women, the proportions are fairly similar since twenty-six (forty-four per cent) achieved degrees and thirty (fifty per cent) withdrew, while just three (six per cent) were dropped. (See Table 71.)

Table 71
Number of students who transferred to the General College,
transferred to another college in the university,
and earned degrees, withdrew, or were dropped

	Men		Women		Total	
	N	%	N	%	N	%
Degree	111	45.5	26	44.0	137	45.2
Withdraw	107	43.8	30	50.0	137	45.2
Dropped	26	10.7	3	6.0	29	9.6
Total	244	100%	59	100%	303	100%

As was true of the students originally registered in the General College, those in this group were admitted eventually to five other colleges within the university.[2] The ensuing divisions of this chapter will take up each group separately.

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[1] Certain exceptions to this policy have been explained in previous chapters of this report.

[2] As in Chapter III, students who went to the S.L.A. college and remained to earn four-year degrees or transferred to other programs from S.L.A. will be discussed under the arts college heading, except that those who transferred to the College of Education or to the School of Business Administration from S.L.A. will be considered under the names of those colleges.

1. The College of Science, Literature, and the Arts

Again the largest number of students, 177 (58.4 per cent of the total group), transferred to the College of Science, Literature, and the Arts. There were 151 men among them and twenty-six women. Of the men, sixty-three (41.7 per cent) eventually earned bachelor's degrees, seventy-six (fifty per cent) withdrew, and twelve (8.3 per cent) were dropped for low scholarship; and of the women, six (twenty-three per cent) were graduated, seventeen (sixty-five per cent) withdrew, and three (twelve per cent) were dropped by the university for academic deficiency. (See Table 72.)

Table 72

Students who transferred into the General College and then transferred to the College of Science, Literature, and the Arts

	Men		Women		Total	
	N	%	N	%	N	%
Degree	63	41.7	6	23	69	38.9
Withdraw	76	50.0	17	65	93	52.5
Dropped	12	8.3	3	12	15	8.6
Total	151	100%	26	100%	177	100%

Men:

The distributions of majors followed about the same pattern for the transfer students who entered the four-year programs in S.L.A. as for the men discussed in Chapter III, with thirty-nine of these academic majors (sixty-six per cent) in social sciences, eighteen (thirty-one per cent) in the humanistic studies, and two (three per cent) in natural science. The General College percentile average for the entire group was 78, thirteen points above the 65 required for transfer.

Within the social science area, a variety of majors is represented: economics (six), history (nine), political science (five), sociology (six), geography (three), psychology (three), and other social studies (seven). These students achieved a General College percentile average of 75.

Eighteen men (thirty-one per cent of the men who earned degrees) majored in some division of the humanistic studies: speech (five), art (one), journalism (four), interdepartmental majors (two), and architecture (one). Here, too, the record in the General College (75) was well above the crucial 65 necessary for transfer. Only two men (three per cent of the degree group) majored in natural science, both of them in geology. Their General College percentile average was high, standing at 81. (See Table 73.)

Table 73
Majors, number, per cent, and General College percentile averages for men degree students who transferred into the General College and then transferred to four-year liberal arts majors in the College of Science, Literature, and the Arts

Major	N	% of N	GC %ile Average
Economics	6	15	75
History	9	23	81
Political Science	5	13	82
Sociology	6	15	73
Geography	3	8	83
Psychology	3	8	83
Other Soc. Sci.	7	18	73
Total Soc. Sci.	39	66%[a]	79
Speech	5	29	74
Art	1	6	88
Journalism	4	24	87
Interdepartmental	2	12	84
Architecture	1	1	65
Total Hum. Stud.	18	31%[b]	75
Geology	2	3%[c]	81
Total	59		78

[a] Per cent of total group.

[b] Per cent of total group.

[c] Per cent of total group.

A look at the mean ability scores for these men who transferred to the S.L.A. college reveals that there was very little difference between those who succeeded in winning degrees, those who eventually withdrew, and those who were dropped. In all three instances, the CAR is from two to four points above the 40 which gained them admission to a four-year college in the first place (the mean CAR for the entire group is 42). However, those who achieved degrees had a General College percentile average of 78, five points above the 73 of those who withdrew and six above the 72 of those who were dropped. The HSR, often called the best single predictor of success in college, was also a little higher for the degree students, who had 48, than for the withdrawals (46) and the drops (43). (See Table 74.)

Table 74
Mean ability scores of men students who transferred into the General College and then transferred to four-year liberal arts programs in the College of Science, Literature, and the Arts

	N	HSR (mean)	ACE (mean)	Coöp (mean)	CAR (mean)	GC %ile Average
Degree	59	48	39	31	43	78
Withdraw	76	46	36	31	42	73
Dropped	12	43	45	34	44	72
Total	147	46	37	31	42	74

It is of some interest to observe that thirty-nine per cent of the 147 men who make up this transfer group to S.L.A. were awarded the Associate in Arts degree by the General College. Sixteen (twenty-seven per cent) of the fifty-nine men who eventually earned bachelor's degrees in the liberal arts four-year curricula also had the A.A., as did thirty-one (forty per cent) of those who withdrew from the university, and four (thirty-three per cent) of those who were dropped. (See Table 75.)

Table 75
Men students who transferred to the General College, received the A.A. degree, and then transferred to four-year liberal arts programs in the College of Science, Literature, and the Arts

	N	N of AA	% of N
Degree	59	16	27
Withdraw	76	31	40
Dropped	12	4	33
Total	147	51	35

Four men earned four-year degrees having entered special programs after preparation for those programs in the S.L.A. college. Three of these degrees were awarded in the University College, and one in the Law School. No students withdrew or were dropped from these courses of study. (See Table 76.)

Table 76
Majors, number, per cent, and General College percentile averages for men degree students who transferred into the General College, transferred to the College of Science, Literature, and the Arts, and then entered other programs

Major	N	% of N	GC %ile Average
University College	3	75	84
Law	1	25	75
Total	4	100%	82

Women:

Of the twenty-six women who transferred to S.L.A., six (twenty-three per cent) eventually were graduated with the Bachelor of Arts degree, seventeen (sixty-five per cent) withdrew from the university, and three (twelve per cent) were dropped because of poor academic performance. The six degrees were awarded in five major fields: sociology (two), humanities (one), Library Instruction (one), speech (one), and journalism (one). The General College record of these women was good: 80 percentile average for the whole group. (See Table 77.)

Table 77
Majors, number, per cent, and General College percentile averages for women degree students who transferred into the General College and then transferred to the College of Science, Literature, and the Arts

Major	N	% of N	GC %ile Average
Sociology	2	33.6	83
Humanities	1	16.6	66
Library Instruction	1	16.6	88
Speech	1	16.6	73
Journalism	1	16.6	89
Total	6	100%	80

The ability scores of these women do not present any very reliable predictor of performance in college. For example, the mean CAR of the students who were dropped (48) is ten points above the 38 of those who won degrees and four points higher than the 44 of those who withdrew; and the students who were dropped were substantially better in both the mean Coöp score and the mean ACE score than the other two groups. In mean HSR, both the withdrawals and the drops exceeded the degree students. Only in the General College percentile average, where the top score of 80 for the degree students surpasses the 77 of the withdrawals and the 74 of those who were dropped, do the figures appear to have some relation to ultimate success. It should be remembered in this context, however, that the category of dropped students includes only three persons, a very insubstantial group indeed. Even so, in no category of women in this study was any considerable number dropped, so that either conclusions must be drawn upon a small group or a decision reached that, on the whole, women who transfer from the General College are not asked to leave the university because of scholastic performance. (See Table 78.)

Table 78
Mean ability scores of women students who transferred into the General College and then transferred to the College of Science, Literature, and the Arts

	N	HSR (mean)	ACE (mean)	Coöp (mean)	CAR (mean)	GC %ile Average
Degree	6	47	27	54	38	80
Withdraw	17	58	27	49	44	77
Dropped	3	51	45	67	48	74
Total	26	55	29	52	43	77

Only three (twelve per cent) of the twenty-six women in the S.L.A. group qualified for the Associate in Arts degree: one who also earned the B.A. and two of those who finally withdrew. (See Table 79.)

Table 79
Women students who transferred to the General College, received the A.A. degree, and then transferred to the College of Science, Literature, and the Arts

	N	N of AA	% of N
Degree	6	1	17
Withdraw	17	2	12
Dropped	3	-	0
Total	26	3	12

By and large, the students who transferred to the General College from elsewhere and then later transferred to S.L.A. had mean CAR's close to the score of 40 which is the line of demarkation for acceptance or rejection by the arts college. Substantially, these people were at the lower edge of the S.L.A. population and at the topmost point in the General College population, so near to each that placement in either depends upon a few points one way or another. The CAR in this instance, therefore, appears to have been an uncertain predictor of academic success, since these students were given a trial in another college and failed to make the grade there. It would seem that their experience in the General College, giving them a second chance to make a respectable record and then to re-enter a four-year college, was profitable for a sizable number: for those who proved themselves in the General College and went on to win the bachelor's degree eventually, and for those who completed their university work with courses in general education and even were awarded the Associate in Arts degree at the end of their residence.

2. The College of Education

Included in the group who transferred to the College of Education were sixty-five men and women (twenty-one per cent of the students initially registered elsewhere, but subsequently enrolled in the General College) divided almost equally, thirty-three men and thirty-two women. Out of the whole group, forty-one (sixty-three per cent) received degrees: twenty-one men (sixty-four per cent) and twenty women (62.5 per cent). A little more than thirty-two per cent withdrew, nine men and twelve women; and three men were dropped by the university for low scholarship. (See Table 80.)

Table 80
Students who transferred into the General College and then transferred to the College of Education

	Men		Women		Total	
	N	%	N	%	N	%
Degree	21	64	20	62.5	41	63.0
Withdraw	9	27	12	37.5	21	32.3
Dropped	3	9	--	----	3	4.7
Total	33	100%	32	100%	65	100%

Men:

The twenty-one men who earned the Bachelor of Science degree in some branch of professional education represented six major fields: Business Education (one), Social Studies (two), Natural Science (one), Elementary Education (two), Industrial Education (one), and Physical Education and Recreational Leadership (fourteen). As with the education students considered in Chapter III, by far the largest number of degrees, about two thirds, went to students in Physical Education-Recreational Leadership. The General College percentile average for the degree group is 69, but except for the one student in Industrial Education whose percentile average of 64 was identical with that of the men in Physical Education-Recreational Leadership, the other students had averages from eleven to twenty-one points above the 65 generally required for transfer.[3] (See Table 81.)

Table 81
Majors, number, per cent, and General College percentile average for men degree students who transferred to the General College and then transferred to the College of Education

Major	N	% of N	GC %ile Average
Business Education	1	4.8	86
Social Studies	2	9.5	77
Natural Science	1	4.8	83
Elementary Education	2	9.5	76
Industrial Education	1	4.8	64
Phy. Ed. and Rec. Lead.	14	66.6	64
Total	21	100%	69

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[3] As has been observed previously, the College of Education makes some exceptions to the 65 rule for transfer to some special programs.

Consideration of the mean ability scores for the men who transferred to programs in education reveals some wide differences between the subject matter students and the majors in Physical Education-Recreational Leadership who won degrees. On all counts, the former group was noticeably superior to the latter: sixteen points higher on the mean HSR, forty-seven points higher on the mean ACE, thirty-five points higher on the mean Coöp score, and twenty-three points higher on the mean CAR. A similar spread existed in the General College percentile average where the two figures stood at 77 and 64. The students who withdrew also did better than the degree students in Physical Education-Recreational Leadership, though the spread was not so wide; and the students who were dropped (only three in all) were higher on mean HSR and mean Coöp score, lower on mean ACE and mean CAR than the degree men in Physical Education-Recreational Leadership, and identical with them in General College percentile average. (See Table 82.)

Table 82
Mean ability scores of men students who transferred to the General College and then transferred to the College of Education

	N	HSR (mean)	ACE (mean)	Coöp (mean)	CAR (mean)	GC %ile Average
Subject matter	7	58	69	49	55	77
Phy. Ed. & Rec.L.	14	42	22	14	32	64
Total degree	21	47	38	26	40	69
Withdraw	9	48	20	18	41	68
Dropped	3	45	13	16	29	64
Total	33	47	31	23	39	68

Eight (twenty-four per cent) of the thirty-three men who transferred to the College of Education were awarded the Associate in Arts degree by the General College. Four A.A.'s went to students who also earned the Bachelor of Science degree, two to students who withdrew, and two to men who were dropped for low scholarship. (See Table 83.)

Table 83
Men students who transferred into the General College, received the A.A. degree, and then transferred to the College of Education

	N	N of AA	% of N
Subject matter	7	2	29
Phy. Ed. and Rec. Lead.	14	2	14
Total degrees	21	4	19
Withdraw	9	2	22
Dropped	3	2	67
Total	33	8	24

Women:

The twenty degrees earned by women in the College of Education were divided into two groups: twelve (sixty per cent) in Elementary Education, and eight (forty per cent) in Physical Education-Recreational Leadership. Here, as with the male transfer students, those in Elementary Education presented a substantially better General College percentile average (73) than did the others (64). (See Table 84.)

Table 84
Majors, number, per cent, and General College percentile average for women degree students who transferred to the General College and then transferred to the College of Education

Major	N	% of N	GC %ile Average
Elementary Education	12	60	73
Phy. Ed. and Rec. Lead.	8	40	64
Total	20	100%	69

There is less spread among the ability scores for the women who won degrees than for the corresponding group of men. The women students who majored in Elementary Education were five points higher (51) in mean HSR than those in Physical Education-Recreational Leadership (46) and three points higher on the mean Coöp score (58 and 55). But the Physical Education-Recreational Leadership students were three points better on the mean ACE (34 and 31), and the two groups were identical on the mean CAR (41). Only in General College percentile average was there an appreciable difference between the two, with the Elementary Education people at 73 and the others at 64. Ability scores for the students who withdrew were generally lower than for the degree students, except for the mean HSR, which was higher for those who withdrew. No women were dropped from the College of Education for scholastic deficiency. (See Table 85.)

Table 85
Mean ability scores of women students who transferred to the General College and then transferred to the College of Education

	N	HSR (mean)	ACE (mean)	Coöp (mean)	CAR (mean)	GC %ile Average
Elem. Ed.	12	51	31	58	41	73
P.E. & Rec. L.	8	46	34	55	41	64
Total degree	20	49	32	57	41	69
Withdraw	12	52	23	36	36	72
Dropped	--	--	--	--	--	--
Total	32	50	29	49	39	70

Seven (twenty-two per cent) of the women who transferred to the College of Education were given the Associate in Arts degree by the General College. Four A.A.'s went to students who were later also to hold the Bachelor of Science, and the other three to students who withdrew. (See Table 86.)

Table 86
Women students who transferred into the General College, received the A.A. degree, and then transferred to the College of Education

	N	N of AA	% of N
Elementary Education	12	2	17
Phy. Ed. and Rec. Lead.	8	2	25
Total degrees	20	4	20
Withdraw	12	3	25
Dropped	--	-	--
Total	32	7	22

In general, the mean ability scores of the students who transferred to the College of Education were lower than those of the men and women who went from the General College to the College of Science, Literature, and the Arts; and the General College percentile average followed a similar pattern. However, there is one exception to the foregoing statement: the ability scores of the men who earned degrees in subject-matter areas in education and of the women who majored in Elementary Education were even higher than the mean ability scores of the degree students in liberal arts specializations in the S.L.A. college.

3. *The School of Business Administration*

Thirty-three men who transferred to the School of Business Administration represent 10.8 per cent of the transfer group with which this chapter is concerned. Of that number, twenty-two (sixty-seven per cent) succeeded in qualifying for the Bachelor of Business Administration degree, while eight (twenty-four per cent) withdrew, and three (nine per cent) were dropped because of unsatisfactory scholastic performance. (See Table 87.)

Table 87
Students[a] who transferred into the General College and then transferred to the School of Business Administration

	N	%
Degree	22	67
Withdraw	8	24
Dropped	3	9
Total	33	100

[a] This group consists only of men.

The twenty-two degrees were earned in seven different areas of specialization in the School of Business: General Business (ten), Accounting (five), Advertising (one), Industrial Relations (two), Insurance (one), Merchandising and Selling (two), and Finance (one). Except for the one student whose field was Accounting and whose General College percentile average was 63, the record of these students was good in the General College so that the mean score for the entire group was 73. (See Table 88.)

Table 88

Majors, number, per cent, and General College percentile average for degree students who transferred into the General College and then transferred to the School of Business Administration

Major	N	% of N	GC %ile average
General Business	10	45	78
Accounting	5	23	63
Advertising	1	4	71
Industrial Relations	2	10	84
Insurance	1	4	69
Merchandising and Selling	2	10	81
Finance	1	4	71
Total	22	100	73

Somewhat unexpectedly, perhaps, the mean ability scores and the General College percentile average for the degree students fall below those of the students who withdrew and who were dropped for low scholarship, and even below the mean ability scores and total percentile average for the entire group. The students who left the university voluntarily and those who were asked to leave because of scholastic deficiency appeared on the basis of all scores to have a more promising educational future than did the degree students; yet they did not finish their university work, and those who seemed least well prepared were graduated. It may be reasonable to guess that some unmeasured factor of motivation figured in the success of the students who earned bachelor's degrees. (See Table 89.)

Table 89

Mean ability scores of students transferred into the General College and then transferred to the School of Business Administration

	N	HSR	ACE	Coöp	CAR	GC %ile Average
Degree	22	36	46	35	41	73
Withdraw	8	42	60	43	49	78
Dropped	3	45	58	42	52	77
Total	33	38	50	37	43	74

An unusually high percentage (thirty-three per cent) of the students in business earned the Associate in Arts degree while they were enrolled in the General College. Eight of the men who subsequently were awarded the B.B.A. also had the A.A. degree, as did one of those who withdrew and one of those who were dropped. Again it would appear that these degree students whose ability scores predicted less success than did the scores of the other two groups were spurred by a desire for achievement to complete both a two-year and a four-year degree during their stay at the university. (See Table 90.)

Table 90

Students who transferred to the General College, received the A.A. degree, and then transferred to the School of Business Administration

	N	N of AA	% of N
Degree	22	8	37.0
Withdraw	8	1	12.5
Dropped	3	1	12.5
Total	33	10	30.0

4. The College of Agriculture, Forestry, and Home Economics

Just five students (1.9 per cent) transferred to the College of Agriculture, Forestry, and Home Economics -- four men and one woman. One of the men earned a Bachelor of Science degree, with a major in Animal Husbandry; two eventually withdrew; and the fourth was dropped for low scholarship. The only woman in this group registered in Home Economics, but subsequently canceled out of that program. Among the withdrawals, one man and one woman had received the Associate in Arts degree during their residence in the General College. (See Table 91.)

Table 91

Students who transferred into the General College and then transferred to the College of Agriculture, Forestry, and Home Economics

	Men		Women	
	N	%	N	%
Degree[a]	1	25	-	---
Withdraw	2[b]	50	1[c]	100
Dropped	1	25	-	---
Total	4	100%	1	100%

[a] The student's major was Animal Husbandry.

[b] One of the men students who withdrew had received an A.A. degree in the General College.

[c] The one woman who registered in Home Economics and then withdrew had been given an A.A. degree by the General College.

Ability scores for the men who registered in the Institute of Agriculture were noticeably lower than for those who enrolled in the other colleges. In no case did the CAR even come close to the 40 required for admission to the arts college, for instance, perhaps because the College of Agriculture, Forestry, and Home Economics does not require that the CAR be at that level. However, even the HSR, which this college says must be in the top twenty-five per cent of the graduating class, does not approach that point for any student. Moreover, the Coöp score for all four men is very low indeed, and the General College percentile average is also low in terms of that of the usual transfer student, except for the percentile average of the only woman, who made a score of 89. (See Table 92.)

Table 92

Mean ability scores[a] and General College percentile averages of students who transferred to the General College and then transferred to the College of Agriculture, Forestry, and Home Economics

	N	HSR	ACE	Coöp	CAR	GC %ile Average
Degree	1	34	14	1	24	68
Withdraw	2	38	3	1	21	63
Dropped	1	29	4	2	17	50
Total	4	36	6	1	20	60

[a] Ability scores were not available for the one woman who eventually withdrew. Her General College percentile average was 89.

It should be noted that this particular transfer group is so small that its members can be described and discussed only as individuals. Their records and scores could not be used safely in counseling or advising, except to cite single persons who transferred to programs in agriculture and home economics and achieved varying degrees of success.

5. The Institute of Technology

Twenty-three men (7.5 per cent) transferred from the General College to the Institute of Technology. Of this group, four (17.3 per cent) completed five-year programs to earn degrees, twelve (52.7 per cent) withdrew from the Institute, and seven (thirty per cent) were dropped for low scholarship. (See Table 93.)

Table 93
Students[a] who transferred into the General College and then transferred to the Institute of Technology

	N	%
Degree	4	17.3
Withdraw	12	52.7
Dropped	7	30.0
Total	23	100%

[a] This group consists only of men.

The four degrees represent three areas of specialization: Architectural Engineering (one), Electrical Engineering (one), and Mechanical Engineering (two). The General College percentile average of 87 for these men who achieved degrees is notably high, with the lowest in the range at 77 and the highest 95. (See Table 94.)

Table 94
Majors, number, per cent, and General College percentile average for students who transferred into the General College and then transferred to the Institute of Technology

Major	N	% of N	GC %ile Average
Architectural Engineering	1	25	77
Electrical Engineering	1	25	95
Mechanical Engineering	2	50	87
Total	4	100%	87

Mean ability scores for the students who transferred to the Institute of Technology are of some interest. For the degree students, for example, the mean HSR of 70 and the mean CAR of 56 are both appreciably higher than are found for most General College students, even for those who transfer to the college from elsewhere, though the mean ACE and the mean Coöp scores are more nearly usual. The mean HSR of 48 for the students who withdrew from the engineering programs is twenty-two points below that of the degree students (70), and the mean HSR (44) of those who were dropped is even lower comparatively. However, the mean CAR for withdrawals (53) is only three points below that of the degree students (56), but nine points higher than that of the students who were dropped (42). It should, of course, be taken into account that while the withdrawals did somewhat less well in the General

College than did the degree students, the General College percentile average of the men who were dropped is substantially lower than the averages of both other groups. (See Table 95.)

Table 95
Mean ability scores of students who transferred into the General College and then transferred to the Institute of Technology

	N	HSR	ACE	Coöp	CAR	GC %ile Average
Degree	4	70	40	29	56	87
Withdraw	12	48	52	42	53	80
Dropped	7	44	43	26	42	67
Total	24					87

During their residence in the General College, six of these men received the Associate in Arts degree granted by that college. The largest number, three, went to students who subsequently withdrew from the university; two were earned by students who were finally dropped from the engineering programs in which they had been enrolled, and one was awarded to a man who later became a graduate engineer. (See Table 96.)

Table 96
Students who transferred to the General College, received the A.A. degree, and transferred to the Institute of Technology

	N	N of AA	% of N
Degree	4	1	25.0
Withdraw	12	3	25.0
Dropped	7	2	28.5
Total	23	6	26.0

The men who succeeded in earning degrees in the Institute of Technology possessed ability scores far above average for General College students and even appreciably higher than necessary for admission to the four-year colleges of the university. Even so, they had previously been unsuccessful scholasticall However, their performance in the General College was unusually good, perhaps indicating some degree of academic rehabilitation which may have helped to carry them through.

Conclusions:

It goes without saying that students who are initially admitted to other colleges of the university and to colleges elsewhere on the basis of certain ability scores and background appear at the start of their college experience to have more chance for academic success than do those students whose test results and previous preparation cause them to be assigned to the General College. And for the majority in both groups, such placement is probably reasonable and right. However, the ability scores of a certain segment of the student population fall so close to the traditional cut-off point that registration in one college or another often depends upon only a few points, with the result that for them the scores on ability tests may or may not be reliable indicators of scholastic aptitude. The point is well illustrated by the academic records of many of the students with whom this chapter has been concerned. Admitted originally to the college of their choice on the university campus or elsewhere, they nevertheless did not attain their educational objectives, and so they enrolled in the General College, most of them probably with the intention of trying to qualify once more for a program leading to a bachelor's degree. Some of them reached their goal, but others withdrew, and still others were dropped by the university for low scholarship. Their ultimate achievement is not very different from that of the men and women who originally registered in the General College: even though their ability scores were somewhat higher on the whole, the ones who earned degrees were better students in the General College, by and large, than those who withdrew and those who were dropped. Moreover, the percentage of degrees earned is about the same for both groups, with a similar proportion of withdrawals and drops. Once again the ability scores, at least for this marginal group, appear to have a somewhat uncertain value for predictive purposes, and what seems to count more heavily is some factor of motivation or desire for achievement that urges some students to a creditable performance in the General College and some of those same men and women to eventual success after transfer.

V. STUDENTS WHO ENTERED TWO-YEAR PROGRAMS

A comparatively small number of students are included in the group who entered two-year programs offered at the university and whose two-year degree or certificate represents the end of their university work. Sixty-four men and women completed such courses in several curricula.[1] Twenty-nine men and fourteen women were awarded a degree or certificate in the two-year programs in which they were enrolled; sixteen men and one woman withdrew; and four men were dropped from these courses for scholastic reasons. (See Table 97.)

Table 97
Men and women who were registered in the General College and transferred to two-year programs elsewhere at the university

	Men	Women	Total
Degree	29	14	43
Withdraw	16	1	17
Dropped	4	--	4
Total	49	15	64[a]

[a] Just men and women who earned only two-year degrees are included in this table although three additional two-year degrees appear in Table 100 and Table 101. The distinction is made in order to keep the population count accurate. See footnotes to Table 100 and Table 101.

The most popular program in the two-year category was Mortuary Science, in which forty-nine men[1] enrolled, forty-two of them who had been original registrants in the General College and seven who had registered first in another college, then transferred to the General College, and finally been admitted to the Department of Mortuary Science. Twenty-five of these men, approximately fifty per cent, finished the program and were graduated with the degree of Associate in Mortuary Science. Twenty men withdrew,[2] and four were dropped for low scholarship. (See Table 98.)

Table 98
Men[a] who registered in Mortuary Science after their transfer from the General College

	Men originally in GC		Men transferred to GC	
	N	%	N	%
Degree	22	52.5	3	42.9
Withdraw	16	38.0	4	57.1
Dropped	4	9.5	-	----
Total	42	100%	7	100%

[a] One woman withdrew from the program in Mortuary Science.

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[1] One woman who completed the Associate in Liberal Arts degree in the S.L.A. college went on to win a Bachelor of Arts in American Studies. Two men followed a similar procedure: one received the A.L.A. and also a B.A. in speech, and the other the Certificate in Practical Nursing and the B.S. in Industrial Education. All three are counted among the four-year degree students and not here, since the two-year degree was not terminal for them.

[2] One woman registered in and then withdrew from this program. She is accounted for in the withdrawal column in Table 97 and in the footnote to Table 98.

The mean ability scores of the men who were originally registered in the General College and who then transferred to the Department of Mortuary Science are perhaps somewhat lower than the scores of some transfer students and higher than those of others. However, for the Mortuary Science students, the General College percentile average is noticeably below that of other transfer students, by and large, since the degree students had 57, the withdrawals 53, and the drops only 33. (See Table 99.)

Table 99
Mean ability scores of men originally[a] registered in the General College and transferred to Mortuary Science

	N	HSR (mean)	ACE (mean)	Coöp (mean)	CAR (mean)	GC %ile Average
Degree	22	26	19	13	23	57
Withdraw	16	31	13	9	21	53
Dropped	4	19	4	6	14	33

[a] Mean ability scores were not found for the seven men who entered this program after transferring to the General College.

General College men transferred to three other two-year programs at the university. One who earned the A.L.A. degree (see footnote 2) presented fairly low ability scores, but achieved a General College percentile average of 81; another who earned a Certificate in Practical Nursing (see footnote 2) had a fairly low Coöp score, but other ability scores comparable to those of many transfer students, and his General College percentile average was 61.

Seven men earned two-year certificates in the Technical Aid program offered for a time by the Institute of Technology.[3] Ability scores for these men were very much like those of other transfer students, but their General College performance was below average, the mean percentile score being only 48. (See Table 100.)

Table 100
Mean ability scores of men who received various two-year degrees following their transfer from the General College

Major	N	HSR (mean)	ACE (mean)	Coöp (mean)	CAR (mean)	GC %ile Average
A.L.A.	1[a]	19.0	----	10.0	----	81.0
Tech. Aid	7	38.3	19.3	11.0	27.6	48.0
Pract. Nurs.	1[b]	40.0	19.0	6.0	30.0	61.0

[a] This man later received the B.A. in speech. He has been counted among the students receiving four-year degrees.

[b] This man later received the B.S. in Industrial Education. He has been counted among the students receiving four-year degrees.

Fifteen women went into two-year curricula following their transfer from the General College. Three completed the Associate in Liberal Arts degree in the S.L.A. college (see footnote a, Table 97); their mean HSR was more promising than that of many transfer students, but their ability scores otherwise were comparable to the scores of the others. However, their General College percentile average of 73.5 was well above the 65 which is the cut-off point for transfer to S.L.A.

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[3] The number of withdrawals and drops was so negligible that these have been included in the proper categories in Chapter III, 5.

Twelve women were graduated with the Certificate in Practical Nursing. Their ability scores were not unlike those of most of the other transfer students, but their record in the General College -- percentile average of 48.75 -- is less good than most. (See Table 101.)

Table 101
Mean ability scores of women who received two-year degrees following their transfer from the General College

Major	N	HSR (mean)	ACE (mean)	Coöp (mean)	CAR (mean)	GC %ile Average
A.L.A.	3[a]	44.3	20.6[b]	28.0	32.6[c]	75.30
Pract. Nurs.	12	36.0[d]	12.0[e]	22.7[f]	24.1[g]	48.75

[a] One woman later received the B.A. in American Studies. She has been counted among the students receiving four-year degrees.

[b] There was no ACE for one woman in this group.

[c] There was no CAR for one woman in this group.

[d] There was no HSR for one woman in this group.

[e] There was no ACE for one woman in this group.

[f] There was no Coöp score for one woman in this group.

[g] There was no CAR for one woman in this group.

Although the center of interest in this report has up to now been focused upon students who transferred to four-year programs, those who pursued two-year courses with some success deserve consideration in a study concerned with achievement. Except in individual cases, the ability scores did not foretell success for these young men and women, nor did their performance in the General College. Nevertheless, many of them did complete the course upon which they had set out, so that they must be counted among those who attained a desired goal.

VI. STUDENTS WITH MORE THAN ONE DEGREE

A separate chapter of this study must needs be devoted to one special group: those who succeeded in attaining more than one academic degree after their transfer from the General College. There were twenty-seven such students, falling into four categories, of whom twenty-three were originally registered in the General College and four had at first been enrolled elsewhere and had then transferred to the General College.

Nine students, all of whom had at first been admitted to the General College, were awarded one bachelor's degree and went on to earn still another. Six had been given the Bachelor of Arts in as many subjects -- music, speech, sociology, geography, psychology, and economics --and then entered the College of Education to obtain professional Bachelor of Science degrees, some continuing in their original field and others changing to another specialization. A seventh student, also finally enrolled in education, had left the General College to finish his first B.S. degree at one of the Wisconsin state colleges and then returned to the University of Minnesota to complete another B.S., in elementary education, in the College of Education here. The two other double baccalaureate degrees were earned in other colleges than Education: one student who had finished a B.A. with a major in architecture in the College of Science, Literature, and the Arts, was then admitted to the Institute of Technology where he was awarded a Bachelor of Architectural Engineering degree; and the second, who had specialized in Law with a B.A. from the S.L.A. college, enrolled finally in the Law School where he was given a Bachelor of Science in Laws. Although there are only nine students to be considered in this category, it may be of some value to note that their General College percentile average of 73.5 is nearly ten points above the cut-off point for transfer, but about the same as that of the students who completed one four-year degree in all the other colleges. Among the ability scores, the only one in which the two-degree persons appear to have any appreciable advantage is the Coöp, where they have a mean score ranging from 6.5 to 11.5 points higher than that attained by the men students who were enrolled in the four-year degree programs. Even so, the only safe conclusion is probably that the person who earns one four-year degree is able to earn another if he desires to -- an interesting point, though not particularly useful to the General College adviser whose immediate problem is to assess the potentiality of the aspirant to transfer and to one baccalaureate degree, but hardly ever to two. (See Table 102.)

Table 102
General College percentile average and ability scores
of original General College students who earned two
bachelor's degrees subsequent to transfer from the General College

Degree I	Degree II	N	%ile Ave.	HSR	ACE	Coöp	CAR
B.A. Music	B.S. Music Ed.	1	80	46	20	39	33
B.A. Speech	B.S. Speech Ed.	1	45	53	6	22	30
B.A. Sociology	B.S. N-K-P	1	83	43	11	65	27
B.A. Geography	B.S. Soc. Stud.	1	80	37	9	8	23
B.A. Architect.	B. Architecture	1	75	49	13	9	31
B.S. (Wis. State)	B.S. Elem. Ed.	1	67	10	4	2	7
B.A. Psychology	B.S. Elem. Ed.	1	94	15	16	68	16
B.A. Economics	B.S. Dist. Ed.	1	72	36	16	1	26
B.A.	B.S.L.	1	66	--	27	23	--
Totals		9	73.5	35.7[a]	13.6	26.3	24.0[b]

[a] There was no HSR for one student.

[b] There was no CAR for one student.

Another group, eight men, five of whom had been enrolled in the General College originally and three of whom had registered in the college with varying numbers of credits of advanced standing, were successful in finishing the professional program in the Law School. Five were awarded both a Bachelor of Science in Laws (B.S.L.) and a Bachelor of Laws (L.L.B.) degree, and three graduated with both a B.A. and an L.L.B. (In addition, five other men, not yet graduated, were still enrolled in the Law School at this writing.) The General College percentile average for this group is higher by approximately six points than for those who earned one or two bachelor's degrees, and it is 14.6 points higher than the cut-off percentile average of 65. Special note ought perhaps to be taken of the Coöp scores for these law students: at least six of them are above the expected Coöp results for General College students, and the two lowest do belong to students not originally registered in the General College. It may be feasible to offer a mild generalization at this point: that just possibly, students who are interested in law ought to present an above-average facility with language (in terms of General College students who have a sixteenth percentile on university norms[1]). The mean Coöp score even for the entire group, though pulled down by one student whose score was at the first percentile, is higher than that of the average General College student, so that the performance on the Coöperative English Test appears to have some value for both advisers and counselors who may deal with students aspiring to be lawyers. (See Table 103.)

Table 103

General College percentile average and ability scores of students[a] who earned either a Bachelor of Science in Law (BSL) or a Bachelor of Arts (BA) degree and also a Bachelor of Laws (LLB) degree

	N	%ile Ave.	HSR (mean)	ACE (mean)	Coöp (mean)	CAR (mean)	Advanced Standing
BSL - LLB	1	88	40	28	1	34	9 quarters
BA - LLB	1	95	43	43	18	43	3 quarters
BSL - LLB	1	75	--	74	40	--	5 quarters
BSL - LLB	1	65	21	38	40	30	---
BA - LLB	1	70	7	55	78	31	---
BA - LLB	1	66	29	27	20	28	---
BSL - LLB	1	90	11	60	78	36	---
BSL - LLB	1	86	10	50	71	30	---
Total	8	79.4	24.4[b]	41.6	38.4	28.6[c]	

[a] Three of these students transferred to the General College with advanced standing as indicated in the table. Five of them were students who were originally registered in the General College. Five others were still in law school at this writing.

[b] There was no HSR for one student.

[c] There was no CAR for one student.

Still another category, a very small one involving only three students, all originally students in the General College, transferred first to the S.L.A.

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[1] Eckert, op. cit., p. 79.

college and eventually to the School of Dentistry, finishing with both a B.S. and a Doctor of Dental Surgery (D.D.S.) degree. (Three others were still in the School of Dentistry at this writing.) It is clear that so few persons cannot be regarded as typical of students who become dentists and that, therefore, they must be looked upon singly and not typically. However, the fact that two of the three earned General College percentile averages considerably above the cut-off point of 65 (one was 80, and the other 92) and that the third possessed an average of 69 indicates that here, as elsewhere, a good record in the General College has some relation to success in other academic endeavors. On the other hand, both the mean CAR (16.5) and the mean Coöp (3) are very low in comparison with both of these scores for the average General College student as well as for the typical transfer student (though it should be noted that there was no Coöp or CAR for one of the three individuals so that the figures quoted are found on the scores of only two persons, scarcely to be regarded as representative of anything). (See Table 104.

Table 104
General College percentile average and ability scores for original General College students[a] who earned a Bachelor of Science degree and the degree of Doctor of Dental Surgery after transfer from the General College

N	%ile Ave.	HSR	ACE	Coöp	CAR
1	80	11	10	2	11
1	92	42	--	-	--
1	69	31	13	4	22
Total - 3	80	28	11.5[b]	3[c]	16.5[d]

[a] Three others were still enrolled in the College of Dentistry at this writing.

[b] There was no ACE for one student.

[c] There was no Coöp score for one student.

[d] There was no CAR for one student.

The fourth and final category involves seven individuals, six originally General College students and only one with advanced standing, who attained both a bachelor's and a master's degree, representing several areas of study. First, two who had received the B.S. in Recreational Leadership from the College of Education went on to earn the Master of Education degree from the same college; each of these possessed a General College percentile average appreciably lower than the 65 usually required for transfer in the first place and noticeably lower than the mean (75.1) for this group, one having 54 and the other 58; but despite the proximity of the percentile averages, there was about as much disparity between the ability scores of these two as between those within the entire group. Then, three more students who had earned the Bachelor of Business Administration (B.B.A.) degree in the School of Business Administration, all majoring in industrial relations as undergraduates, continued to the master's degree; two of these kept the same specialty that they had pursued before, and one took the Master of Hospital Administration (M.H.A.) degree. All three showed higher than average General College percentile ranks -- at 75, 82, and 94; and the mean CAR for the two for whom such figures were available was fairly high (37), though there was a wide discrepancy between their Coöp scores, with one at 66 and the other at 8. Finally, the seventh individual presented a rather unusual example since although he had originally registered in the General College, he had gone from there to Lafayette College in Pennsylvania, where he had completed the B.A. degree, and then returned to the Graduate School at the University of Minnesota to qualify for an M.A. in Curriculum and Instruction. No ability scores were obtainable for this last student, but his General College percentile average was 87, twenty-two points above the requirement for transfer and 11.9 points above the mean for the persons who earned master's degrees. (See Table 105.)

Table 105
General College percentile average and ability scores for students who earned both a bachelor's and a master's degree subsequent to transfer from the General College[a]

Bachelor's	Master's	N	%ile Ave.	HSR	ACE	Coöp	CAR
B.A. from Lafayette College	M.A. in Curr. and Instr.	1	87	---	---	---	---
B.B.A. Ind. Rel.	M.A.	1	75	35	38	66	37
B.B.A. Ind. Rel.	M.A.	1	82	44	30	8	37
B.S. Rec. Lead.	M. Ed.	1	54	40	20	11	30
B.S. Rec. Lead.	M. Ed.	1	58	26	10	2	18
B.S. Hosp. Ad.	M.H.A.	1	76	28	16	8	22
B.B.A. Ind. Rel.	M.H.A.[b]	1	94	---	---	---	---
Total		7	75.1	34.7[c]	22.8[d]	19[e]	28.8[f]

[a] Five students were still in the Graduate School at this writing.

[b] This student had three quarters of advanced standing before registering in the General College.

[c] There was no ACE for two students in this group.

[d] There was no HSR for two students in this group.

[e] There were no Coöp scores for two students in this group.

[f] There was no CAR for two students in this group.

Despite the fact that the twenty-seven students discussed in this chapter represent just slightly more than two per cent of the 1278 students who entered four-year degree programs at the university, it is probably of interest at least to point out that the General College percentile average for the twenty-seven was 76.4, more than ten points higher than the averages earned by the total of men students enrolled in four-year programs in the various colleges. On the whole, the spread of HSR and ACE figures is fairly limited when one compares the double-degree students with those who earned one degree, but the Coöp of the persons who went on to two degrees ranged from 6.5 points higher than the scores of the transfers to the College of Agriculture, Forestry, and Home Economics to 13.5 points higher than the scores of the graduates from the College of Education, whose transfer group showed lower ability scores and lower General College percentile averages than did those in the other colleges. (See Table 106.)

Table 106

Ability scores and General College percentile averages of men students enrolled in four-year degree programs and students completing more than one degree after transfer from the General College

	N	GC%ile Average	HSR (mean)	ACE (mean)	Coöp (mean)	CAR (mean)
Two degrees	27	76.4	30.7	26.5	28.5	27.3
S.L.A.	391	72.0	31.0	23.0	21.0	27.0
Business	118	74.0	32.0	22.0	18.0	28.0
Agriculture	40	73.0	40.0	26.0	22.0	32.0
I.T.	77	68.0	32.0	26.0	17.0	28.0
Education	175	65.0	28.0	17.0	15.0	23.0

Obviously, there are sharp discrepancies between the numbers of students represented by the various categories shown in Table 106; and just as obviously, one unusually successful group -- those who earned two degrees -- is here being held up for some kind of comparison with General College students who entered four-year programs but did not necessarily complete these programs in the various colleges of the university. Such a basis of comparison is established purposefully, not inadvertently, in an effort to give advisers and counselors some ground, however uncertain, on which to take a stand. A quick glance reveals that the ability scores and the General College percentile averages do not differ greatly from one group to another, although these averages are notably higher than that required for transfer. The mean HSR varies only a little from group to group, with one exception in the students who transferred to the College of Agriculture, Forestry, and Home Economics;[2] the mean ACE shows some superiority among the students who earned two degrees, as does the mean Coöp, though it must be kept in mind that this superiority exists in terms of their own contemporaries in the General College and not in terms of other students in the university.[3] Perhaps two conclusions are in order: that students who succeeded in attaining two degrees did indeed achieve strong percentile averages in the General College program which they undertook, and that notwithstanding the small hope for success held out by their ability scores, these twenty-seven individuals must have brought to their effort in college some as yet unmeasured desire for success, which ultimately carried them farther than figures alone could predict.

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[2] "On the basis of high school scholarship the group [General College students as a whole] came from the lower half of their own high school graduating classes and half of the men students came from the lowest third." Description of the General College student population from Williams, op. cit., p. 79. ". . . most of those who graduate from other college and schools in the University of Minnesota come from the upper 40 per cent of their high school classes, and those who maintain averages in the College of Science, Literature, and the Arts to permit entry to one of the professional schools (medicine, law, dentistry, or business) and who receive their degrees are almost exclusively from the upper 25 per cent of their high school graduating classes." Ibid.

[3] ". . . [the] average [ACE score of freshmen who enter the General College] falls at about the twenty-fifth percentile for all freshmen in the University of Minnesota and at the tenth percentile for freshmen in the College of Science, Literature, and the Arts." Description of the General College student population. Ibid., p. 80. "On the other hand, if we include all its other schools and colleges, graduates of the University of Minnesota are clearly students who ranked above the middle of their group as freshmen, and graduates of professional schools for which professional background in the arts college is required were even more highly selected." Ibid.

VII. A SUMMARY: THE TRANSFER GROUP AS A WHOLE

After the foregoing survey of the several units which compose the entire population with whom this study is concerned, it seems desirable to consider the group in a new way, as made up of certain component parts, in order to discover about all of the students who began in the General College and all those who were initially registered elsewhere what kind of high schools they came from, what their abilities were, what colleges they transferred to, and what degree of success they attained in the programs where they enrolled. Then, finally, the reasonable step is to draw both groups together and to discuss all of them as a single population to determine what percentage of the total did achieve degrees, what percentage withdrew, and what percentage were eventually dropped for low scholarship. A practical procedure may be to divide this chapter into three parts and to deal with the transfer students in the order outlined above.

1. Those Who Originally Registered in the General College

Young men and women who had been graduated from the public high schools in Minneapolis made up the largest single group here: 39.3 per cent of the men and 39.3 per cent of the women were Minneapolis graduates. For the men, the percentages ran downward from that high point to twenty per cent from small towns in Minnesota, 17.6 per cent from St. Paul, and a little over five per cent each from suburbs around the Twin Cities and from private-parochial high schools. Of some interest, also is that 5.7 per cent of the men had been admitted to the university by certificate, not having been graduated from any high school. In addition to those women from Minneapolis secondary schools, the proportions showed 16.3 per cent from St. Paul, 11.4 per cent each from small towns in Minnesota and private-parochial schools, and 8.1 per cent from the suburbs around Minneapolis and St. Paul.

Of the men who completed bachelor's degrees, 44.3 per cent were graduates of Minneapolis public high schools, 18.9 per cent were from St. Paul, and 18.9 per cent were from small towns in Minnesota; the other men degree students were scattered among the other high school categories. Women who had been graduated from public secondary schools in Minneapolis composed 45.3 per cent of the total number of women who earned degrees; then, in descending order, 14.2 per cent were from suburban high schools near the Twin Cities, 12.5 per cent from private-parochial high schools, and 9.1 per cent each from St. Paul and from small towns in Minnesota.

The mean CAR's for these men who won degrees are distributed over a range from 19 (for six students from large cities in Minnesota, excluding the Twin Cities) to 32 (for thirteen students who came from out-of-state schools),[1] in no instance coming close to the 40 required by the arts college for transfer. Except for the one man from outside the United States, only those men who came from states other than Minnesota had a mean HSR higher than 40. The women degree students, on the other hand, showed a much wider spread in both mean CAR's and mean HSR's; for them, the mean CAR's ranged from 8 (for one student from a private high school) to 33 (for eight students who had been graduated from high schools in suburbs around Minneapolis and St. Paul). There was a similarly noticeable difference between the bottom and the top HSR's of the women, from 7 (for the previously cited student from a private high school) to 33 (for the same eight women who had come from suburban schools). The two suburban high school graduates who withdrew had unusually high ability scores for General College students.

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[1] One student from outside of the United States had the highest CAR, 34.

Among the degree groups of any appreciable size, men from small towns and from private high schools made the best record in the General College (percentile average of 74), followed very closely by Minneapolis graduates (73). Women from private-parochial high schools appeared to be most successful in their General College work, having made a percentile average of 74, with those from Minneapolis public high schools achieving an average of 72 and those from small towns in Minnesota, 70. (See Table 107 and Table 108.)

Table 107
Kind of high school, ability scores, and General College percentile average for men originally registered in the General College and transferred to other colleges within the university

High School	N	HSR (mean)	ACE (mean)	Coöp (mean)	CAR (mean)	GC %ile Average
Minneapolis Public						
Degree	178	32	20	19	27	73
Withdraw	121	31	23	21	27	69
Dropped	32	24	26	21	26	63
St. Paul Public						
Degree	68	31	22	22	26	70
Withdraw	75	30	22	18	26	67
Dropped	6	29	16	6	23	60
Suburban[a]						
Degree	18	26	21	23	24	71
Withdraw	24	28	26	19	27	73
Dropped	2	16	24	23	20	58
Large City[b]						
Degree	6	23	13	8	19	62
Withdraw	8	30	24	21	27	66
Dropped	0	--	--	--	--	--
Small Town[c]						
Degree	69	36	21	16	29	74
Withdraw	89	33	22	17	27	72
Dropped	11	25	16	6	21	60
Out-of-State						
Degree	13	41	19	18	32	71
Withdraw	9	47	22	9	39	81
Dropped	5	25	82	18	46	79
Private						
Degree	7	26	18	30	22	74
Withdraw	1	29	2	19	16	51
Dropped	0	--	--	--	--	--
Private Parochial						
Degree	18	26	26	33	27	69
Withdraw	20	25	26	25	25	69
Dropped	4	16	20	19	18	67
University High						
Degree	5	19	31	25	25	72
Withdraw	4	20	25	6	22	69
Dropped	0	--	--	--	--	--
Out-of-U.S.A.						
Degree	1	49	18	10	34	70
Withdraw	0	--	--	--	--	--
Dropped	0	--	--	--	--	--
No Diploma						
Degree	18	--	25	12	--	75
Withdraw	28	--	28	11	--	70
Dropped	2	--	36	12	--	65

[a] Suburbs of Minneapolis and St. Paul.

[b] Large cities in Minnesota, excluding Minneapolis and St. Paul: Duluth, Winona, Rochester, Austin, Albert Lea, etc.

[c] Small towns in Minnesota.

Table 108
Kind of high school, ability scores, and General College percentile average for women students originally registered in the General College and transferred to other colleges within the university

High School	N	HSR (mean)	ACE (mean)	Coöp (mean)	CAR (mean)	GC %ile Average
Minneapolis Public						
Degree	25	42	17	34	30	72
Withdraw	23	39	25	39	33	67
St. Paul Public						
Degree	5	37	12	34	25	60
Withdraw	15	44	20	46	32	70
Suburban[a]						
Degree	8	45	19	54	33	69
Withdraw	2	69	86	92	78	78
Large City[b]						
Degree	0	--	--	--	--	--
Withdraw	1	77	18	51	48	80
Small Town[c]						
Degree	5	35	18	36	27	70
Withdraw	7	49	12	25	30	74
Dropped	2	40	25	12	33	62
Out-of-State						
Degree	2	46	2	3	23	67
Withdraw	4	60	13	27	37	73
Private						
Degree	1	7	9	11	8	67
Withdraw	2	39	40	83	40	73
Private Parochial						
Degree	7	29	24	51	28	74
Withdraw	7	26	17	42	22	76
University High						
Degree	2	24	23	41	24	66
Withdraw	1	14	15	29	15	78
Out-of-U.S.A.						
Degree	1	--	9	13	--	84
Withdraw	0	--	--	--	--	--
No Diploma						
Degree	0	--	--	--	--	--
Withdraw	1	--	2	1	--	70
Dropped	1	--	--	--	--	27

[a] Suburbs of Minneapolis and St. Paul.

[b] Large cities in Minnesota, excluding Minneapolis and St. Paul: Duluth, Winona, Rochester, Austin, Albert Lea, etc.

[c] Small towns in Minnesota.

A look at the numbers by which these original General College students transferred to the five other colleges shows that by far the most men (52.4 per cent) went to the S.L.A. college and that the College of Education, the School of Business Administration, the Institute of Technology, and the College of Agriculture, Forestry, and Home Economics followed in that order.

The women transferred to only three colleges, 53.3 per cent to the College of Education, 42.5 per cent to S.L.A., and only 4.2 per cent to the School of Home Economics in the College of Agriculture, Forestry, and Home Economics. (See Table 109.)

Table 109
Summary table of students originally registered in the General College and transferred to four- or five-year programs in other colleges within the university

	Men		Women		Total	
	N	%	N	%	N	%
S.L.A. and others	445	52.4	51	42.5	496	50.8
Education	175	20.4	64	53.3	239	24.6
Business	118	13.6	--	----	118	12.1
Agric. and H.E.	40	4.6	5	4.2	45	4.6
I.T.	77	9.0	--	----	77	7.9
Total	855	100%	120	100%	975	100%

Fifty-nine women and 402 men earned four- or five-year degrees in the colleges to which they transferred. The distribution of degrees for women follows the same order as that in which the women transferred to other colleges, though by far the highest number of degrees (76.4 per cent) were earned by those who transferred to the College of Education. For the men, the order is very nearly the same as that in which they transferred, except that a little higher percentage won degrees in agriculture and forestry than in the various engineering programs in the Institute of Technology. (See Table 110.)

Table 110
Summary table of degree students originally registered in the General College and transferred to four- or five-year programs in other colleges within the university

	Men		Women		Total	
	N	%	N	%	N	%
S.L.A.[a]	202	50.2	13	22.0	215	46.6
Education	99	24.6	45	76.4	144	31.2
Business	77	19.1	--	----	77	16.7
Agric. and H.E.	13	3.2	1	1.6	14	3.0
I.T.	11	2.9	--	----	11	2.5
Total degrees	402	100%	59	100%	461	100%

[a] The S.L.A. degree group includes thirty men and six women who transferred from the arts college to other programs.

Percentagewise, more men (fifty-six per cent) and women (sixty-two per cent) withdrew from the S.L.A. college than from any other. Among the men, the drop to seventeen per cent who withdrew from the College of Education is fairly sharp, and it is interesting to note that twelve per cent of those men who withdrew were from the Institute of Technology. The withdrawals for women follow a pattern that might be anticipated, related closely to the number who transferred to the different colleges. (See Table 111.)

Table 111
Summary table of students originally registered in the General College who transferred to four- or five-year programs in other colleges within the university and then withdrew

	Men		Women		Total	
	N	%	N	%	N	%
S.L.A.[a]	219	56.0	36	62.0	254	56.0
Education	67	17.0	18	31.0	85	19.0
Business	30	8.0	--	----	30	7.0
Agric. and H.E.	26	7.0	4	7.0	30	7.0
I.T.	50	12.0	--	----	50	11.0
Total withdraw	392	100%	58	100%	450	100%

[a] The S.L.A. group includes twenty-one men who withdrew after transferring to other programs from the arts college.

Only sixty-four men and women (sixty-one men and just three women) were dropped for low scholarship out of the 975 who transferred to other colleges. The percentage is barely over seven per cent. For both men and women, the greatest number of drops were from the arts college, but for the men the percentage dropped from I.T. is high in proportion to the total number who transferred there. (See Table 112.)

Table 112
Summary table of students originally registered in the General College, who transferred to four- and five-year programs in other colleges within the university and then were dropped

	Men		Women		Total	
	N	%	N	%	N	%
S.L.A.[a]	24	39.3	2	66.7	26	40.6
Education	9	14.7	1	33.3	10	15.6
Business	11	18.2	-	----	11	17.1
Agric. and H.E.	1	1.6	-	----	1	1.7
I.T.	16	26.2	-	----	16	25.0
Total dropped	61	100%	3	100%	64	100%

[a] The S.L.A. group includes three men who were dropped after transferring to other programs from the arts college.

There is very little spread among the mean ability scores for the students who transferred to other colleges following their original registration in the General College. The mean CAR's for the men, for instance, range from 23 for the transfers to education to 32 for those who went to agriculture and forestry; and there is just about as limited a spread in the mean HSR's, ACE's, and Coöp scores. None are really unlike what might be expected of General College students. The mean CAR's, ACE's, and Coöp scores for the women reach a somewhat higher level than those of the men, although just for the five women who enrolled in the School of Home Economics does the mean CAR come up to the familiar 40 (a requirement not exacted by that particular school). Only the men who transferred to the College of Education did not achieve a General College percentile average above 65 (probably because of the influence of the record made by those who went into Physical Education and Recreational Leadership), the other men and women making averages from 69 to 75. (See Table 113.)

Table 113

Mean ability scores and General College percentile averages for all students originally registered in the General College and transferred to four- or five-year programs in other colleges

Men

	N	HSR (mean)	ACE (mean)	Coöp (mean)	CAR (mean)	GC %ile Average
S.L.A.	391	31	23	21	27	72
S.L.A. to others	54	32	24	19	28	75
Education	175	28	17	15	23	65
Business	118	32	22	18	28	74
Agriculture	40	40	26	22	32	73
I.T.	77	32	26	17	28	68

Women

	N	HSR (mean)	ACE (mean)	Coöp (mean)	CAR (mean)	GC %ile Average
S.L.A. and others	51	40	21	42	31	75
Education	64	40	18	37	30	69
Agriculture (H.E.)	5	51	33	57	42	72

No very clear picture emerges concerning the mean HSR of the variously sized groups of men and women who transferred to the five colleges and either earned degrees or withdrew. Their mean HSR's were very much alike, varying by only a few points one way and another. However, except for the men who transferred to the School of Business Administration and the women who went into education, there is a noticeable decline in high school rank among the students who were dropped for scholastic deficiency. Even more unpredictable is the record of the mean ACE and the mean CAR where frequently the students who were dropped appear to have outperformed or at least equaled those who completed degrees or left college of their own accord; and a similar situation occurs in the mean Coöp scores whose level seems to have little relation to the final result of the students' efforts in college. However, as has been pointed out elsewhere, the performance in the General College does seem to be tied somehow to what happens to these students; for on the whole, though not invariably, the degree students had somewhat higher percentile averages than did the withdrawals, and in every college without exception, the students who were dropped for low scholarship from four- or five-year programs were also those whose General College percentile average was lowest. (See Table 114, Table 115, and Table 116.)

Table 114
Mean ability scores and General College percentile averages for all degree students originally registered in the General College and transferred to four- or five-year programs in other colleges

Men

	N	HSR (mean)	ACE (mean)	Coöp (mean)	CAR (mean)	GC %ile Average
S.L.A.	172	31	22	23	26	72
S.L.A. to others	30	30	21	15	25	77
Education	99	30	18	14	25	68
Business	77	34	23	18	29	75
Agriculture	13	45	21	27	33	75
I.T.	11	38	26	18	32	71

Women

	N	HSR (mean)	ACE (mean)	Coöp (mean)	CAR (mean)	GC %ile Average
S.L.A. and others[a]	13	30	15	24	23	78
Education	45	40	16	37	29	69
Agriculture (H.E.)	1	19	36	75	28	62

[a] Including the six women who transferred first to S.L.A. and then to some other program.

Table 115
Mean ability scores and General College percentile averages for all students originally registered in the General College who transferred to four- or five-year programs in other colleges and then withdrew

Men

	N	HSR (mean)	ACE (mean)	Coöp (mean)	CAR (mean)	GC %ile Average
S.L.A.	198	32	23	19	27	72
S.L.A. to others	21	35	25	24	31	74
Education	67	25	16	16	20	62
Business	30	26	22	15	24	73
Agriculture	26	38	29	20	33	73
I.T.	50	33	28	18	30	67

Women

	N	HSR (mean)	ACE (mean)	Coöp (mean)	CAR (mean)	GC %ile Average
S.L.A.	36	39	21	41	31	76
Education	18	38	24	38	31	71
Agriculture (H.E.)	4	59	32	53	46	75

Table 116

Mean ability scores and General College percentile averages for all students originally registered in the General College who transferred to four- or five-year programs in other colleges and then were dropped for low scholarship

Men

	N	HSR (mean)	ACE (mean)	Coöp (mean)	CAR (mean)	GC %ile Average
S.L.A.	21	23	31	23	26	66
S.L.A. to others	3	23	46	19	35	67
Education	9	22	20	15	21	51
Business	11	27	25	12	26	63
Agriculture	1	11	5	15	8	42
I.T.	16	25	21	10	23	66

Women

	N	HSR (mean)	ACE (mean)	Coöp (mean)	CAR (mean)	GC %ile Average
S.L.A.	2	33	27	23	30	64
Education	1	46	23	1	35	60
Agriculture (H.E.)	0	--	--	--	--	--

It may prove fruitful to give some additional attention to the academic record made in the General College by the young men and women who started there and then later transferred to other colleges of the university. As has been observed regarding the tables immediately above, performance in the General College appears to bear some relation to success elsewhere: at least, the percentile average for students who won degrees was noticeably higher than for those who were asked to leave because of scholastic deficiency. Granting that such a relationship may exist, it is useful to investigate to see whether the percentile rank of 65, commonly regarded as proper to qualify a student for transfer, is a reasonable level to settle upon. On the basis of Table 117 (below) and of Table 118 (also below) which was computed from the figures in Table 117, one may conclude that since the median scores for both men and women who completed degrees fell above the crucial 65 and since the Q_1 score for the men was at 65 and the Q_1 for the women at 61, the cut-off point now in use is workable. (See Table 117 and Table 118.)

Table 117
Distribution and cumulative percentages of percentile ranks for men students who received four- and five-year degrees and for women students who received four-year degrees

Percentile Average	Men Degree Students Frequency	Men Degree Students Cumulative Percentages	Women Degree Students Frequency	Women Degree Students Cumulative Percentages
94.5 -	2	100.0	1	100.0
89.5 - 94.5	19	99.6	1	98.3
84.5 - 89.5	42	94.8	5	96.6
79.5 - 84.5	62	84.4	10	87.8
74.5 - 79.5	52	69.0	3	70.3
69.5 - 74.5	73	56.0	6	65.0
64.5 - 69.5	57	37.8	9	54.5
59.5 - 64.5	41	23.7	11	28.6
54.5 - 59.5	17	13.5	4	19.3
49.5 - 54.5	8	9.2	6	12.3
44.5 - 49.5	15	7.2		
39.5 - 44.5	8	3.2	1	1.8
34.5 - 39.5	4	1.5		
29.5 - 34.5	1	.8		
24.5 - 29.5	1	.4		
Total	402		Total	57[a]

[a] Percentile ranks were not available for two women who earned degrees.

Table 118
Quartile scores (average General College percentile rank) obtained by men students who received a four- or five-year degree and by women students who received a four-year degree

	(N = 402) Men	(N = 57) Women
Q_3	81.5	80.9
Median	72.9	68.1
Q_1	65.0	61.0

A further basis for comparison concerns the percentile averages made by men who completed four- and five-year degrees and by men who were dropped for scholastic reasons. Though the median and the Q_3 for the latter group were at 65.2 and 74.3, the Q_1 was 55.3, whereas the degree students' Q_1 was 65 and their median was 72.9. (See Table 119 and Table 120.)

Table 119
Distribution and cumulative percentages of percentile ranks for men students who received four- or five-year degrees and for those who were dropped for low scholarship

	Degree		Drop	
Percentile Average	Frequency	Cumulative Percentages	Frequency	Cumulative Percentages
94.5 -	2	100.0	1	100.0
89.5 - 94.5	19	99.6		
84.5 - 89.5	42	94.8	5	98.5
79.5 - 84.5	62	84.4	4	90.4
74.5 - 79.5	52	69.0	5	84.0
69.5 - 74.5	73	56.0	10	75.8
64.5 - 69.5	57	37.8	7	59.8
59.5 - 64.5	41	23.7	7	48.5
54.5 - 59.5	17	13.5	9	37.2
49.5 - 54.5	8	9.2	4	22.6
44.5 - 49.5	15	7.2	1	16.2
39.5 - 44.5	8	3.2	4	14.6
34.5 - 39.5	4	1.5	3	8.1
29.5 - 34.5	1	.8	1	3.2
24.5 - 29.5	1	.4	1	1.6
Total	402	Total	62[a]	

[a] Percentile ranks were not available for two men who were dropped.

Table 120
Quartile scores (average General College percentile rank) obtained by men students who received a four- or five-year degree and for those who were dropped for low scholarship

	(N = 402) Degree	(N = 62) Drop
Q_3	81.5	74.3
Median	72.9	65.2
Q_1	65.0	55.3

A final look shows that a fairly strong contrast exists between the Q_3, median, and Q_1 General College percentile averages of degree students (both men and women) and those who were dropped. For the students who completed degrees, the median in both categories exceeds 65 by several points, while for the men who were dropped, it stands almost exactly at 65. Also, the degree students surpassed the record of the drops at the Q_3 level (81.5 for the men and 80.9 for the women to 74.3 for those who were dropped), and they did likewise at the first quartile (65 and 61 to 55.3). (See Table 121.)

Table 121
Quartile scores (average General College percentile rank)
for men and women students who received four- or five-year degrees
and for men students who were dropped for low scholarship[a]

	(N = 402) Men Degree	(N = 51) Women Degree	(N = 62) Men Dropped
Q_3	81.5	80.9	74.3
Median	72.9	68.1	65.2
Q_1	65.0	61.0	55.3

[a] Since only three women students were dropped for low scholarship (two from the College of Science, Literature, and the Arts, and one from the College of Education) a drop-category like that for men students could not be established.

The foregoing figures appear to indicate that the percentile average of 65 is a useful line of demarkation and that if a student's record falls very much below that point his chances for academic success are not very bright in any college to which he may transfer.

2. Those Who Transferred to the General College with Advanced Standing

As was true of the students, both men and women, who registered originally in the General College, the largest single group -- about a third -- of those who transferred to the college from other colleges within the university or from colleges elsewhere were graduates of public high schools in Minneapolis. Small town high schools in Minnesota (twenty-five per cent) and private-parochial high schools (13.3 per cent) sent the next most numerous groups of men, and the St. Paul public schools were represented by just 9.5 per cent of the total number of men. In addition to the approximate one third from public high schools in Minneapolis, 19.3 per cent of the women came from small towns in Minnesota, 12.8 per cent from private-parochial high schools, and 11.2 per cent each from St. Paul public schools and suburban secondary schools in the Twin Cities area.

The percentage of degrees for both men and women followed a pattern similar to that of their high schools. With the degree students, it proved true that about a third of both men and women were products of Minneapolis public high schools. Then, for the men, 19.6 per cent of the degrees were won by students from private-parochial schools, nineteen per cent from small town high schools in Minnesota, and 11.7 per cent from high schools in St. Paul. In addition to the 33.3 per cent of the degrees earned by women graduates of Minneapolis public high schools, two other appreciable groups can be cited: 29.6 per cent from small town secondary schools in Minnesota and 18.5 per cent from private-parochial high schools.

Examining the mean CAR's of men degree students in relation to the high schools from which these men were graduated, one discovers that those in the deciles above the cut-off point of 40 included seven students from private high schools (mean CAR, 67); five from out-of-state high schools (mean CAR, 60); six from suburban high schools in the Minneapolis-St. Paul area (mean CAR, 54); thirteen from the St. Paul schools (mean CAR, 47); and thirty-seven from Minneapolis secondary schools (mean CAR, 44). Two sizable groups fell just below the line: twenty-two men from small towns in Minnesota (mean CAR, 38) and fourteen from private-parochial high schools (mean CAR, 37). The highest mean HSR was the 70 presented by students from suburban high schools, and the lowest in any sizable group was the 42 of men from private-parochial high schools. The figures appear to indicate that ability scores do not necessarily win diplomas.

Mean CAR's for the women degree students ran lower, on the whole, than those for the men. The highest was that of students from small town high schools in Minnesota (44), and the lowest, that of the two degree students from St. Paul whose mean CAR was 15.

The highest mean Coöp score for the men degree students was the 58 made by seven who had been graduated from private high schools, and the highest for the women was the 67 attained by the nine degree students from Minneapolis public high schools.

Performance in the General College is very much the same for those who transferred to the college as for those who registered there initially. The ones with the higher ability scores do not necessarily make a better record in the general education courses which they take prior to re-enrollment in some other college. Also, there was considerable range among the percentile averages earned in the General College. Of the men who completed four or five-year degrees, for instance, the seven students who had attended private high schools had the highest percentile average (83), and those who had attended high school outside of the state made the lowest average (61). One interesting detail is that the General College percentile average for the four men who had not been graduated from high school at all was second highest at 81.

The women who did the best work in the General College were graduates of private-parochial high schools, with an average of 81, and those who did least well of any sizable group were the ones who had attended small town high schools and who achieved an average of 69. Two young women with diplomas from St. Paul public high schools were lowest of all with 67. (See Table 122 and Table 123.)

Table 122

Kind of high school, ability scores, and General College percentile average for men who transferred to the General College and then transferred to another college within the university

High School	N	HSR (mean)	ACE (mean)	Coöp (mean)	CAR (mean)	GC %ile Average
Minneapolis Public						
Degree	37	49	40	27	44	76
Withdraw	31	49	41	35	46	71
Dropped	7	58	49	40	50	75
St. Paul Public						
Degree	13	54	39	37	47	76
Withdraw	7	43	33	28	39	68
Dropped	3	37	24	14	31	60
Suburban[a]						
Degree	6	70	45	38	54	73
Withdraw	11	59	54	46	56	77
Dropped	4	45	59	39	53	79
Large City[b]						
Degree	2	5	28	29	17	78
Withdraw	1	6	--	--	--	58
Dropped	--	--	--	--	--	--
Small Town[c]						
Degree	22	46	31	28	38	75
Withdraw	29	45	31	22	38	75
Dropped	12	39	34	24	37	67
Out-of-State						
Degree	5	25	84	58	60	61
Withdraw	6	21	--	--	--	76
Dropped	--	--	--	--	--	--
Private						
Degree	7	45	85	58	67	83
Withdraw	4	64	45	40	56	78
Dropped	--	--	--	--	--	--
Private-Parochial						
Degree	14	42	32	36	37	76
Withdraw	18	38	32	39	34	73
Dropped	1	29	64	31	47	86
University High						
Degree	1	23	60	26	42	72
Withdraw	--	--	--	--	--	--
Dropped	--	--	--	--	--	--
Out-of-U.S.A.						
Degree	--	--	--	--	--	--
Withdraw	--	--	--	--	--	--
Dropped	1	33	32	42	33	74
No Diploma						
Degree	4	--	37	36	--	81
Withdraw	2	--	56	2	--	71
Dropped	--	--	--	--	--	--

[a] Suburbs of Minneapolis and St. Paul.

[b] Large cities in Minnesota, excluding Minneapolis and St. Paul: Duluth, Winona, Rochester, Austin, Albert Lea, etc.

[c] Small towns in Minnesota.

Table 123

Kind of high school, ability scores, and General College percentile average for women who transferred to the General College and then transferred to other colleges within the university

High School[a]	N	HSR (mean)	ACE (mean)	Coöp (mean)	CAR (mean)	GC %ile Average
Minneapolis Public						
Degree	9	46	27	67	37	70
With. & Drop	11	62	16	47	39	73
St. Paul Public						
Degree	2	27	2	34	15	57
With. & Drop	5	41	23	40	32	66
Suburban[b]						
Degree	3	39	38	50	39	71
With. & Drop	4	63	42	69	53	80
Large City[c]						
Degree	--	--	--	--	--	--
With. & Drop	--	--	--	--	--	--
Small Town[d]						
Degree	8	57	29	40	44	69
With. & Drop	4	52	28	20	42	64
Out-of-State						
Degree	--	--	--	--	--	--
With. & Drop	6	71	19	13	44	73
Private						
Degree	--	--	--	--	--	--
With. & Drop	2	--	10	46	--	78
Private-Parochial						
Degree	5	46	36	54	41	81
With. & Drop	3	43	49	77	46	78

[a] Because of the small number who withdrew and were dropped, these two categories are combined in this table.

[b] Suburbs of Minneapolis and St. Paul.

[c] Large cities in Minnesota, excluding Minneapolis and St. Paul: Duluth, Winona, Rochester, Austin, Albert Lea, etc.

[d] Small towns in Minnesota.

Like the men and women who were initially registered in the General College, the ones who came there with advanced standing transferred in greater numbers (58.5 per cent) to the College of Science, Literature, and the Arts than to any other. However, just as with the other group, the highest proportion of men (61.9 per cent) went to S.L.A., while the greatest number of women (54.2 per cent) entered the College of Education. The men enrolled in equal numbers (13.5 per cent) in the College of Education and the School of Business Administration. Twenty-three men registered in I.T., while only four men and one woman entered programs in the College of Agriculture, Forestry, and Home Economics. (See Table 124.)

Table 124
Summary table of students who transferred to the General College and then transferred to four- or five-year programs in other colleges within the university

	Men		Women		Total	
	N	%	N	%	N	%
S.L.A. and others	151	61.9	26	44.0	177	58.5
Education	33	13.5	32	54.2	65	21.5
Business	33	13.5	--	----	33	10.8
Agric. and H.E.	4	1.6	1	1.8	5	1.7
I.T.	23	9.5	--	----	23	7.5
Total	244	100%	59	100%	303	100%

More men received degrees (fifty-seven per cent), withdrew (seventy-one per cent), and were dropped (46.1 per cent) from the S.L.A. college than from any other -- just as more transferred there in the first place. However, more women (seventy-seven per cent) received degrees from the College of Education than from the other two colleges to which women transferred, and the percentage of women who withdrew is greater from the S.L.A. college (fifty-seven per cent) than from the College of Education (forty-three per cent). Three women were dropped from the College of Science, Literature, and the Arts, and the only one who registered in the School of Home Economics on the St. Paul campus finally withdrew from School. (See Table 125, Table 126, and Table 127.)

Table 125
Summary table of degree students who transferred into the General College and then transferred to other colleges within the university

	Men		Women		Total	
	N	%	N	%	N	%
S.L.A.	63[a]	51.0	6	23	69	50
Education	21	18.0	20	77	41	30
Business	22	19.0	--	--	22	16
Agric. and H.E.	1	1.6	--	--	1	1
I.T.	4	4.4	--	--	4	3
Total degree	111	100%	26	100%	137	100%

[a] Including four men who entered S.L.A. and then transferred to other programs.

Table 126
Summary table of students who transferred into the General College, transferred to other colleges within the university, and subsequently withdrew

	Men		Women		Total	
	N	%	N	%	N	%
S.L.A.	76	71.0	17	57	93	67.8
Education	9	8.4	12	43	21	15.4
Business	8	7.5	--	--	8	5.8
Agric. and H.E.	2	1.9	1	--	3	2.2
I.T.	12	11.2	--	--	12	8.8
Total withdraw	107	100%	30	100%	137	100%

Table 127

Summary table of students who transferred to the General College, transferred to other colleges within the university, and subsequently were dropped

	Men		Women		Total	
	N	%	N	%	N	%
S.L.A.	12	46.1	3	100	15	52.0
Education	3	12.3	-	---	3	10.0
Business	3	12.3	-	---	3	10.0
Agric. and H.E.	1	2.4	-	---	1	4.0
I.T.	7	26.9	-	---	7	24.0
Total dropped	26	100%	3	100%	29	100%

Ability scores for the students who transferred to the General College with advanced standing are too scattered to bear close scrutiny or much comment. Naturally, they are somewhat higher, by and large, than the scores made by original registrants in the college, but otherwise the only observation which seems reasonable is the fairly obvious one: that, on the whole, the mean CAR's are on a level to admit these students to colleges other than the General College -- a privilege of which they took advantage. These scores range as high as 56 for the degree students in the Institute of Technology and as low as the 24 for those in Agriculture. Also, aptitude ratings for those who withdrew and the ones who were dropped were about as promising as for degree students. There are numerous shifts to varying extents in the ability score levels from group to group, as can readily be seen. However, once more, with just a few exceptions, the degree students as well as those who withdrew proved to be better students in the General College than did those who were eventually dropped for scholastic deficiency. (See Table 128, Table 129, and Table 130.)

Table 128

Mean ability scores of men degree students who transferred into the General College and then transferred to other colleges within the university

	N	HSR (mean)	ACE (mean)	Coöp (mean)	CAR (mean)	GC %ile Average
S.L.A.	59	48	39	31	43	78
Education	21	47	38	26	40	69
Business	22	36	46	35	41	73
Agriculture	1	34	14	1	24	68
I.T.	4	70	40	29	56	87

Table 129

Mean ability scores of men students who transferred into the General College, transferred to other colleges within the university, and then withdrew

	N	HSR (mean)	ACE (mean)	Coöp (mean)	CAR (mean)	GC %ile Average
S.L.A.	76	46	36	31	42	73
Education	9	48	20	18	41	68
Business	8	42	60	43	49	78
Agriculture	2	38	3	1	21	63
I.T.	12	48	52	42	53	80

Table 130
Mean ability scores of men students who transferred into the General College, transferred to other colleges within the university, and then were dropped

	N	HSR (mean)	ACE (mean)	Coöp (mean)	CAR (mean)	GC %ile Average
S.L.A.	12	43	45	34	44	72
Education	3	45	13	16	29	64
Business	3	45	58	42	52	77
Agriculture	1	29	4	2	17	50
I.T.	7	44	43	26	42	67

Patterns of ability scores are as unpredictable for the women as for the men. Their CAR's run about the same as those of the men, their ACE's are within the same range, and their HSR's are perhaps a little higher by comparison. The only notable difference is in the mean Coöp scores, where the performance of the women is really higher than that of the men, and where, ironically, the three young women who were dropped for low scholarship exhibited the highest score of all, a 67. Among the women who received degrees from the S.L.A. college, the General College percentile average was high at 80, compared with a somewhat lower average of 77 for those who withdrew, and a little lower average of 74 for those who were dropped. Conversely, the women who won degrees in education had been slightly less good students in the General College than had those who withdrew. And the young woman who withdrew from the School of Home Economics had the highest General College percentile average in the entire group, an 89. (See Table 131, Table 132, and Table 133.)

Table 131
Mean ability scores of women degree students who transferred into the General College and then transferred to other colleges within the university

	N	HSR (mean)	ACE (mean)	Coöp (mean)	CAR (mean)	GC %ile Average
S.L.A.	6	47	27	54	38	80
Education	20	49	32	57	41	69

Table 132
Mean ability scores of women students who transferred into the General College, transferred to other colleges within the university, and then withdrew

	N	HSR (mean)	ACE (mean)	Coöp (mean)	CAR (mean)	GC %ile Average
S.L.A.	17	58	27	49	44	77
Education	12	52	23	36	36	72
Agric. and H.E.	1	--	--	--	--	89

Table 133
Mean ability scores of women students who transferred into the General College, transferred to other colleges within the university, and were dropped

	N	HSR (mean)	ACE (mean)	Coöp (mean)	CAR (mean)	GC %ile Average
S.L.A.	3	51	45	67	48	74

3. The Record of Achievement for All Transfer Students, 1951-1956

The entire transfer group, including all men and women who were initially registered in the General College and all who had transferred to the General College with advanced standing, is composed of 1342 students. The far larger portion was made up of men, who numbered 1148, or 85.6 per cent, of the transfer population. There were just 194 women in all (14.4 per cent). Each of these two groups can be divided, of course, into three parts: those who earned degrees (in two-, four-, or five-year programs), those who withdrew voluntarily, and those whom the university dropped for scholastic reasons.

For the 1148 men in the transfer group, 542, or 47.2 per cent, eventually completed work in two-, four-, or five-year programs; 515, or 44.8 per cent withdrew; and only 91, or eight per cent, were dropped for low scholarship. The degree proportion is changed only negligibly if the two-year people are omitted and just the four- and five-year graduates included, for then the number stands at 513 and the percentage at 46.6 per cent. As a matter of fact, if only men who were initially registered in the General College are included, degree students still constitute forty-seven per cent, so that the proportion of students who earned degrees changes almost imperceptibly no matter how the base population is made up.

A total of 194 young women made the transfer to programs outside of the General College. Of these, ninety-nine, or 51.2 per cent, succeeded in completing two-year or four-year degrees; eighty-nine, or 45.8 per cent withdrew; and only six, or three per cent, were dropped because of scholastic reasons. A slight change downward from 51.2 per cent to 47.5 per cent is effected if the two-year degree students are subtracted from the total, and a lesser drop occurs -- to 49.1 per cent -- when only original registrants in the General College are included. But again the modifications in population make no change really worthy of note.

Finally, it is possible to consider the total number of 1342 transfer students and to compute the proportions of degrees, withdrawals, and drops. The blending of groups of men and women produces no startling variations on the figures already presented, despite the fact that there are almost six times as many men as women. In all, 641, or 47.7 per cent, were granted university degrees in two-, four-, or five-year programs;[2] 604, or forty-five per cent, withdrew of their own volition from the curricula in which they had been enrolled; and only ninety-seven, or 7.3 per cent, were dropped for low scholarship.[3] (See Table 134.)

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[2] If the number of degrees won by these students is counted, the total rises to 671. The figure includes the nine bachelor's degrees awarded students who had already been granted one, the three Doctor of Dental Surgery degrees given students who had previously completed bachelor's degrees, the seven master's degrees achieved by students who had earned bachelor's degrees previously, and the eight Bachelor of Laws degrees attained by men who had completed four-year baccalaureate degrees. Also, the total figure includes two Associate in Liberal Arts degrees earned by students prior to bachelor's degrees and one Certificate in Practical Nursing awarded before the student went on to a Bachelor of Science in Industrial Arts. It seemed both reasonable and practical for the basic purposes of this study to count the men and women as having earned just one degree and then to devote a special chapter and this additional commentary to the additional diplomas which were granted them in excess of one.

Table 134

Grand totals, including both those students who originally registered in the General College and those who transferred to the General College, of degrees, withdrawals, and drops for low scholarship in all programs

Men

College or program	Degree	Withdraw	Dropped	Total
S.L.A. and others	265	295	36	596
Education	120	76	12	208
Business	99	38	14	151
Agric. and Forestry	14	28	2	44
I.T.	15	62	23	100
Mortuary Science	22	16	4	42
Technical Aid	7	--	--	7
Total Men	542	515	91	1148

Women

College or program	Degree	Withdraw	Dropped	Total
S.L.A. and others	19	53	5	77
Education	65	30	1	96
Home Economics	1	5	-	6
A.L.A.	2	--	-	2
Practical Nursing	12	--	-	12
Mortuary Science	--	1	-	1
Total Women	99	89	6	194

Grand Totals

Degree	Withdraw	Dropped	Total
641	604	97	1342

Though no similar figures or percentages from previous studies are available to use as a basis of comparison, the results seem both gratifying and encouraging, perhaps somewhat unexpected and even surprising. General College students appear to have acquitted themselves well. The percentage who earned degrees -- 47.7 per cent -- is indeed impressive, as is the total number of degrees: 996 degrees in all to 1342 young men and women.

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[3] There may be some interest in noting also that 325 men and women -- 225 who were originally registered in the General College and one hundred who transferred to that college -- completed the Associate in Arts degree. This number represents approximately one quarter of the entire transfer population. It is possible to observe further that of the 325 students who completed the A.A., 176, or about fifty-four per cent, were among those who eventually withdrew from the university or were dropped because of scholastic deficiency. Of those 176, 148 (about eighty-four per cent), were withdrawals, and the other twenty-eight (sixteen per cent) were dropped for low scholarship.

VIII. CONCLUSIONS

Although the immediately preceding chapter serves to summarize some of the general findings and those chapters before it to do likewise with some of the more specialized results of this investigation, it seems reasonable to try to set forth from the whole a few concluding statements. Such inferences, it goes without saying, are based upon the foregoing text and particularly upon the many tables included therewith, so that careful examination of the statistical evidence will cause the ensuing observations to appear more meaningful and perhaps less the outcome of subjective judgment. In any case, certain inferences may reasonably be drawn from the material at hand and presented here as observations which the writer has made. Naturally, the reader is free to arrive at still others of his own.

1. The transfer population with whom this study is concerned included 1342 men and women, of whom approximately seventy-seven per cent were initially registered in the General College and the other twenty-three per cent had transferred to the General College with advanced standing. It should be remembered that the total number is comprised only of those who actually attempted work in some college within the university after transfer was granted them, and that it excludes those whose request for transfer was approved and who did not then continue at the university.[1] Nor does it include students whose records would have made them eligible for transfer, but who did not apply.

2. Somewhat more than half of these students were graduates of public high schools in the metropolitan Twin Cities area, a large proportion of those from public secondary schools in Minneapolis. A fairly large representation came from small towns in Minnesota and, understandably enough, very few from larger cities in Minnesota (other than Minneapolis and St. Paul) where local junior colleges and state colleges are available to residents. Private-parochial high schools also contributed a fair representation.

3. On the whole, the ability scores of the students in this study did not foretell very accurately what was eventually to happen to them in college. For the men and women originally registered in the General College, these predictors were perhaps a little on the high side in terms of the usual General College student, though a close examination shows that some fall as low as the first decile; and for those who entered the General College with advanced standing, these aptitude scores were largely only a decile above those of the original registrants in the college -- so that the entire group hovered more or less around the CAR of 40 which is the crucial score used for admission to other programs. In some cases, such as with the men who went into law, the Coop score appeared to be higher than normal so that at times verbal facility seemed to play a significant role in success, but this was the exception rather than the rule. The general pattern held, naturally with numerous exceptions, for those who achieved degrees, for those who

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[1] When the lists of students were drawn up for this study, it would have been possible to collect these names since the cards in the Admissions and Records files included them, but it was decided not to do so. However, all four persons who worked at compiling the lists were impressed and, as faculty members experienced in working with General College students, somewhat astonished at the numbers who, once they had won the coveted opportunity to transfer, decided not to do so.

withdrew, and for those who were dropped for low scholarship. It would seem that these ability scores, then, are only a small part of the over-all picture presented by these students, and that both counselor and adviser must look elsewhere for substantial aid in understanding and working effectively with their advisees who aspire to transfer.

4. If any single factor has predictive value, it appears to be performance in the General College, as evidenced by the General College percentile average, for it is clear that both those who won degrees and those who left the university of their own volition were, by and large, better students in the General College than were those who were dropped for scholastic deficiency. In some students an awakening occurred apparently during their experience in the General College -- obviously not in time to be reflected either in aptitude test scores or in high school performance, but after their enrolling in the college, where they seem to have found in themselves what President Morrill has called the "determination and capacity to succeed."[2] This awakening may be reflected in the very acceptable percentile average attained by these students, an academic performance usually superior to any that they had recorded before.

5. Moreover, the percentile average of 65 in use for some time now as the level which students must reach in order to qualify for transfer to the S.L.A. college (and thence to various professional programs in business, education, law, pharmacy, dentistry, and the University College, to name those most often entered) is, it would appear, a practical cut-off point, since the median for both men and women who received degrees was notably higher than that and since the first quartile fell exactly at 65 for the men and at 61 for the women. In contrast, the median for those who were dropped for academic reasons stood at 65.2, and the first quartile for that group was just 55.3. Thus, the degree of proficiency now required appears to be both useful and effective.

6. A word should be said about the students who withdrew, for there were almost as many in that category as in the degree group (47.7 per cent in the latter, and forty-five per cent in the former). Moreover, there was not very much difference in academic achievement between the two groups except that the students in one completed the two-, four-, or five-year degree and the others did not: their ability scores were essentially alike, as were their high school ranks; and their performance in the General College was very similar. Undoubtedly, some of the withdrawals would eventually have been dropped for scholastic deficiency had they not left voluntarily. But there is reason to believe that many were as good students as those who remained in school and that they left for other than academic reasons. Indeed, such reasoning is corroborated in a document written by the university recorder, True E. Pettengill, who observes that about one third of university freshmen do not return for the sophomore year and cites a recent study made in the S.L.A. college: ". . . the group leaving had an honor point ratio of slightly better than 'C' which makes the drop out group no different as far as grade average in concerned from the group that remained in attendance."[3] He goes on then to cite the results of a series of

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[2] James Lewis Morrill, *The Ongoing State University*, p. 29.

[3] True E. Pettengill, *Some Comments on Attrition Rates As Related to Admission Requirements*, *passim*.

interviews held recently in the S.L.A. college with students who were withdrawing, of whom seventy-eight per cent said that their reasons for leaving were other than scholastic: ". . . 28 per cent financial, 22 per cent academic, 21 per cent vocational, 14 per cent personal, 10 per cent health, and 5 per cent family."[4] Since the withdrawals under consideration here took place following the students' transfer to other colleges in the university, more than half of them to S.L.A., one may assume perhaps that they were prompted for reasons much the same as the ones given above. One wonders whether or not some of these same students may have gone to some other educational institution after their disappearance from the university, and completed degrees there. However, it should be realized, too, that for many students who withdrew before finishing degrees and even for those few who were dropped for academic reasons,[5] survival for however many quarters they remained at the university probably represents a measure of achievement rather than failure, in view of the chances given them for success when they enrolled in the first place.

7. The men and women who were originally registered in the General College and who went on to finish four-year degrees[6] were graduated after from twelve to fifteen quarters (median) of residence in the various colleges to which they had transferred. The length of time required by these students to complete work on their four-year degrees compares favorably with figures available for degree students in other contexts.[7] For example, a study by John E. Stecklein of two-year achievement of transfers from Minnesota junior colleges to the University of Minnesota shows that ". . . 73 (42 per cent) had received their bachelor's degrees within the time span specified [two calendar years, roughly nine academic quarters ."[8]] Stecklein cites a study by Willard O. Stibal, who found that ". . . of June 1956 University graduates . . . 56 per cent had studied for more than 12 quarters before they received their degrees,"[9] as well as another Stibal project involving transfers of all kinds, of whom ". . . 56 per cent . . . had needed more than 12 quarters to graduate."[10] In view of such findings, as well as of a gross estimate used by the university that twenty-five per cent of those who enter the university

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[4] *Ibid*.

[5] The 7.3 per cent who were dropped is perhaps surprisingly low even though it exceeds the drop-out rate from the other colleges by about four per cent.

[6] Figures are available only for the original registrants in the college since funds expired before data could be assembled concerning those with advanced standing.

[7] Those degrees awarded in I.T. are excluded from consideration here since they were earned in five-year programs. But even here the seventeen quarters (median) used to complete degrees does not seem unreasonably high.

[8] John E. Stecklein, *Two-Year Achievement of 1956-57 Minnesota Junior College Transfers at the University of Minnesota*, p. 7.

[9] *Ibid*.

[10] *Ibid*.

receive their degrees in four years and the rest take longer, these degree students who started in the General College show up rather well.

8. There seems to be a fair amount of agreement that approximately fifty per cent of the men and women who enter the University of Minnesota as freshmen eventually complete baccalaureate degrees at the university or elsewhere.[11] Moreover, certain authorities appear also to agree that about forty per cent of that total finish their degrees at the university.[12] Admittedly, the population base involved in the figures just quoted differs from that with which this study is concerned. Yet even as one grants the difference in total groups, one must also grant a difference in academic aptitude and, therefore, in chances for success, at least in terms of academic degrees. Viewed thus, the 47.7 per cent who earned two-, four-, and five-year degrees -- 641 students -- is striking indeed.[13] And the 671 degrees that these students earned outside of the General College are even more impressive when 325 Associate in Arts degrees[14] are added to swell the grand total to 996. Both percentage of degree students and the number of degrees that they won _in toto_ make a proud record by almost any standards.

Thus, the conclusions come to an end. Now that this project is complete, it obviously is only a beginning. For still on the IBM cards awaiting analysis are countless items of information, and in the files are all those transcripts and folders which have yielded the materials for this investigation, but which hold much more as yet untouched. Prospects for the future include several specialized studies involving three separate divisions of the General College -- Literature, Writing, Speech, and Philosophy; Social Studies; and Natural Science and Mathematics -- as well as the General College comprehensive examination. Also, as a natural outgrowth of this present investigation, a study is planned by the writer and one of her colleagues in the General College, Dorothy M. Burrows, of the achievement of General College students who transfer to institutions outside of the university, especially to state colleges in Minnesota. As always, such projects must await financial support, but when the funds are made available, the possibilities for additional research are unlimited.

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[11] _Higher Education in Minnesota, a Report by the Minnesota Commission on Higher Education_, pp. 361-362. Cited here are studies by R. M. West, True E. Pettengill, K. E. Clark, and Leigh Harden _et al_, all of whom endorse this figure.

[12] _Ibid_. A study by Leigh Harden _et al_, "Student Mortality and Survival," a report to the University Senate Committee on Education, October 9, 1943, is quoted as having found that of the freshmen who entered four colleges at the university (S.L.A., I.T., Agriculture, and Education) in the fall quarter of 1937, 37.1 per cent received degrees at the university within six years after their matriculation. The figures appear to be in use still.

[13] Dropping the two-year students affects the total by only about two per cent.

[14] Of the 325 A.A.'s, 176 were earned by students who eventually withdrew or were dropped and presumably would have had no diploma to show for their college work had this one not been awarded.

APPENDIX

Figure 1. For General Record As Well As Record in Literature, Writing, Speech, and Philosophy

No.	Sex	AA	Age	HS K	HS L	Tr Y	HSR	ACE	Eng	Coll Tr To	Major							
Degree	Hon	DLS	W	Res GC	Res OC AT	ASCO	ASSP	31A	31B	31C	31D	31E	31F	32A	32B	32C	32D	
32E	33A	33B	40A	40B	GC Lit	GC Hum	Prep Engl	Engl A	Engl B	Engl C	Comp 4	Comp 5	Comp 6	Comp 7 f	Comp 25 s	Comp 27	Comp 28	Comp 29
Comp 30	Comp 65	Comp 67	Comp 68	Comp 101	Comp 102	Comp 103	Comp 200	Comp 201	Comp 202	Comm 1	Comm 2	Comm 3	Rhet 1	Rhet 2	Rhet 3	Rhet 51	Rhet 26 s	
Engl 4	Engl 5	Engl 6	Engl 85	Engl 86	Jour 11	Jour 13	Jour 14	Jour 15	Jour 19	Spch 1	Spch 2	Spch 5	Spch 31	Spch 32	Spch 33	Phil 1	Phil 2	
Phil 3	JC Lit AT	SC Lit AT	SC Sp AT	JC Hum AT	SC Hum AT	SC Phil AT	Comp 58	% ile Av	Qtrs AS							CAR		

Figure 2. For Social Studies

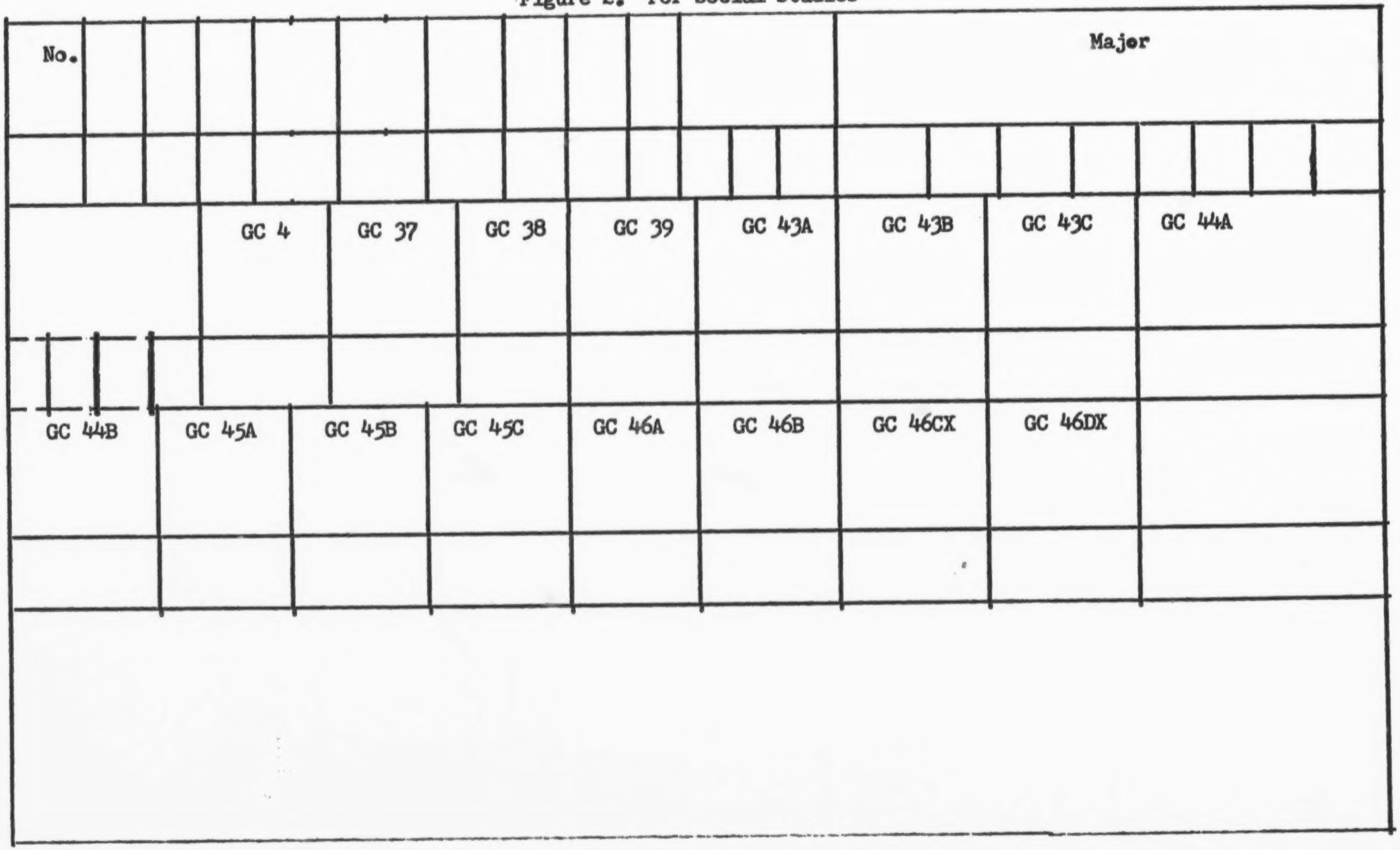
No.
Major
GC 4
GC 37
GC 38
GC 39
GC 43A
GC 43B
GC 43C
GC 44A
GC 44B
GC 45A
GC 45B
GC 45C
GC 46A
GC 46B
GC 46CX
GC 46DX

Figure 3. For Natural Sciences and Mathematics

Student Ident. No.	High School Units Grades 9-12		General College Courses (lines 1-2 first year, lines 3-4 second year)																
	Math	Sci	8A	8B	19A	19B	6A	6B	6C	7A	7B	7C	7D	10A	10B	10C			

Courses in other Colleges (lines 1-2 SLA, lines 3-4 IT)

Mathematics											Physics											
1	6	7	30	50	51	15	16	8	20		1	2	3	11	12	13	14	50				
11	12	13	24	25	26	10					4	5	6	7	8	9						

Courses in other Colleges

Chemistry SLA						Geology					Botany						
1,4	2,5	11,12	Or61	An51	An57	1	2	23	24	25	1	2	3				
Chemistry IT						**Public Health**					**Econ.**	**Soc.**					
6,8,24,14	7,9,25,12	26				3	4	50	51	59	5	45,49					

College Units					Comprehensive Standard Scores					
Math.	Chem.	Phys.	Biol-Health	Geology	Bio.1	Bio.2	Bio.3	P.S. 1	P.S. 2	P.S. 3

Figure 4. Key for LSW Recording Sheet

No. -- code number (to be taken from master list)

Sex -- M or F

AA -- record: none, BT (before transfer), AT (after transfer)

Age -- record: Y (if under 20), O (if 20 or older)

HS loc -- record: name of place in box; if Mpls, St. Paul, suburban, Duluth, White Bear, Stillwater, whether public or private school, put name of school above this box.

HS kind -- record: public or private

Tr year -- record: all transfer years chronologically

HSR -- record: figure at lower left of transcript

ACE -- record: figure at lower left of transcript

Eng -- record: figure at lower left of transcript

Coll T to -- record: name of college transferred to; if more than one, record in order of transfer; if transfer *into* GC, show where from (*e*.g., SLA to GC)

Major -- record: major in college (these will show for SLA, Ed, Bus, Ag, IT) When degree has been granted, the major is written plainly, but on others one can find it only *sometimes* recorded very dimly at right side of transcript.

Degree -- record: all degrees *except AA* recorded in chronological order

Hon -- record: cum, magna, summa, dist, high dist

DLS -- dropped for low scholarship if this is terminal; show number of quarters *after transfer* that student remained before being dropped

W -- means withdrew, canceled, disappeared (anything but DLS); record number of quarters *after transfer* that student remained. If final quarter shows all W's include it if the student canceled after midquarter time, and ignore it if he canceled before midquarter.

Res GC -- record: total number of quarters student was in General College; count summer session as one-half quarter, so that two summer sessions would equal one quarter; also add up quarters when student carried light loads so that 12-17 cr. equal one quarter, 24-34 cr. equal two quarters, 36-51 cr. equal three quarters, etc.

Res OC -- means residence in college other than General College after leaving GC; record the total quarters in residence (cf. above for summer sessions and light loads). Extension courses count *if* they earned credit. Also credits earned in service count *if* student has left General College and gone into service. Do *not* count advanced standing here.

ASCO -- means advanced standing in composition; record any composition credit earned by a student *before he took writing lab in General College*, except in-service and GED credits; record number of credits.

ASSP -- means advanced standing in speech; record any speech credit earned by a student *before he took oral communication in the General College*, except in-service and GED credits; record number of credits.

31A

31B

31C (record 31C in this box *only* beginning Fall, 1955; all 31C previous to Fall, 1955, goes in 31F box)

31D

31E

31F (put all 31C up to Fall, 1955, in this box; also 31F beginning with Fall, 1955)

Record %ile for all these Writing Lab courses; include all Writing Lab courses whether taken before or after transfer -- *i.e.*, we want to know that he took the course, no matter when.

32A

32B

32C Record %ile for all these Oral Communication courses.

32D

32E

33A

33B

If no %ile is given, interpret A as 95, B as 85, C as 50, D as 15, and F as 5.

Record all 32 and 33 courses whether taken before or after transfer -- *i.e.*, we want to know that a student took the course, no matter when.

40A Record %ile for these.

40B

GC Lit -- record: *number* of GC literature courses the student took (these will be numbered 30A, etc.)

GC Hum -- record: *number* of humanities courses the student took while he was registered in General College, whether junior or senior college courses (*i.e.*, the number of the course does not matter so long as it was taken while the student was in the General College).

Prep Engl -- through Phil 3 -- record grade student made in these courses -- A,B,C,D,F,Y,Z -- disregarding any I's which were not made up. Show whether the credit was earned after transfer or during General College residence in this way: C -- AT, or C -- BT.
Note: for Engl A-B-C, record 2 credits as composition, and 3 credits as literature taken in junior college (cf. below).

JC Lit AT -- record: number of junior college literature courses taken after transfer (*i.e.*, courses numbered under 50).

SC Lit AT -- record: number of senior college literature courses taken after transfer (*i.e.*, courses numbered 50 or above).

SC Sp AT -- record: number of senior college speech courses taken after transfer (*i.e.*, courses numbered 50 or above).

JC Hum AT -- record: number of junior college humanities courses taken after transfer (*i.e.*, courses numbered under 50).

SC Hum AT -- record: number of senior college humanities courses taken after transfer (*i.e.*, courses numbered 50 or above).

SC Phil AT -- record: number of senior college philosophy courses taken after transfer (*i.e.*, courses numbered 50 or above).

%ile Av -- record: %ile average as shown in lower right hand corner of material taken from student's folder.

Qtrs AS -- record: number of quarters of advanced standing *before* entering the General College (this is a *separate* count from either Res OC or ASCO or ASSP).

Figure 5. Order of Material and Code for LSW

x1 — x3	Student number	
x4	Sex	0 - M, 1 - F
x5	AA degree	X - none, 1 - before transfer, 2 - after transfer
x6	Age at transfer Kind of hs	0 - under twenty, 1 - twenty or older 4 - public, 5 - private, 6 - priv-paroch, 7 - U high, 8 - out of USA
x7	Loc of hs	0 - Mpls, 1 - St. Paul, 2 - suburban, 3 - large city, 4 - small town, 5 - out-of-state, 6 - no diploma
x8	Year tr from GC Number of transfers	0 - 1951, 1 - 1952, 2 - 1953, 3 - 1954, 4 - 1955, 5 - 1956 6 - 1 tr, 7 - 2 tr, 8 - 3 tr, 9 - 4 or more tr
x9, x10	HSR	
x11, x12	ACE	
x13, x14	Engl Coöp	
x15	College trans to	0 - SLA, 1 - SocW, 2 - Bus, 3 - IT, 4 - Ag, 5 - Mort Sci, 6 - Phar, 7 - Nurs, 8 - UC, 9 - Dent
x16	College trans to	0 - Law, 1 - Ed, 2 - Med, 3 - Grad, 4 - others to GC, 5 - original GC returning to GC, 6 - UMD
x17	Multiple trans	0 - GC to SLA to Bus, 1 - GC to SLA to Ed, 2 - GC to SLA to IT, 3 - GC to IT to SLA, 4 - GC to SLA to Law, 5 - GC to SLA to Bus to SLA, 6 - GC to SLA to Grad, 7 - GC to Ed to Grad, 8 - GC to SLA to Dent, GC to SLA to Phar
x18	Major in college	0 - Am stud, 1 - Anth, 2 - Arch, 3 - Art, 4 - Astron, 5 - Bact, 6 - Biostat, 7 - Bot, 8 - Chem, 9 - Lat Am Area
x19	Major in college	0 - Greek, 1 - Gen Bus, 2 - C & I, 3 - Russ Area, 4 - Soc, 5 - Pre-SocW, 6 - Speech, 7 - Theater, 8 - Zool, 9 - Econ
x20	Major in college	0 - Engl, 1 - Geog, 2 - Geol and Minerol, 3 - Germ, 4 - Hist, 5 - Hum, 6 - Int Rel, 7 - Journ, 8 - Ling, 9 - Math

x21	Major in college	0 - Mus, 1 - Phil, 2 - Physics, 3 - Physiol, 4 - Pol Sci, 5 - Lib, 6 - Psych, 7 - French, 8 - Span, 9 - Ital
x22	Major in college	0 - Norw, 1 - Swed, 2 - Bus-Dist Ed, 3 - Core Curr, 4 - Lang Arts, 5 - Spch Path, 6 - Visit Tch, 7 - NKP, 8 - Elem Ed, 9 - Ind Ed
x23	Major in college	0 - Phys Ed, 1 - Rec Lead, 2 - Acc't'g, 3 - Adv, 4 - Fin, 5 - For Trade, 6 - Ind Rel, 7 - Insur, 8 - Merch Sell, 9 - Off Manage
x24	Major in college	0 - Ret Store Tr, 1 - Secr-Super, 2 - Traff-Trans, 3 - Ag, 4 - HE, 5 - For, 6 - Diet, 7 - Vet Med, 8 - Med Tech, 9 - Xray
x25	Major in college	0 - Occ Ther, 1 - Phys Ther, 2 - Dent Hyg, 3 - Pr Nurs, 4 - Tech Aid, 5 - Sec Stud, 6 - Interdepart, 7 - Aero, 8 - Mech, 9 - Electr Eng
x26	Degree	0 - Mort Sci, 1 - BA, 2 - BME, 3 - BBA, 4 - B Aero E, 5 - B Ag E, 6 - B Chem E, 7 - BEE, 8 - B Geol E, 9 - B Geophys
x27	Degree	0 - BS, 1 - B Appl Math, 2 - B Met E, 3 - B Min E, 4 - B Arch, 5 - B Chem, 6 - B Civ E, 7 - B Met, 8 - B Phys, 9 - Tech Aid
x28	Degree	0 - BM, 1 - BSL, 2 - LLB, 3 - ALA, 4 - Dent Hy, 5 - BS in Nursing, 6 - MA, 7 - MS, 8 - M Ed, 9 - MBA
x29	Degree	0 - M Forest, 1 - M Soc W, 2 - M Hosp Ad, 3 - Pr Nusr, 4 - PhD, 5 - Still in school, 6 - BS in Pharm, 7 - 4-yr degree from other institution than U of M, 8 - DDS, 9 - B Ag BA
x30	Honors	X - none, 1 - cum laude, 2 - magna, 3 - summa, 4 - distinction, 5 - high dist
x31	Drop LS	0 - 1 qtr, 1 - 2 qtrs, 2 - 3 qtrs, 3 - 4 qtrs, 4 - 5 qtrs, 5 - 6 qtrs, 6 - 7 qtrs, 7 - 8 qtrs, 8 - 9 qtrs, 9 - 10 or more qtrs
x32	Withdrew	0 - 1 qtr, 1 - 2 qtrs, 2 - 3 qtrs, 3 - 4 qtrs, 4 - 5 qtrs, 5 - 6 qtrs, 6 - 7 qtrs, 7 - 8 qtrs, 8 - 9 qtrs, 9 - 10 or more qtrs

x33	Res in GC	0 - 1 qtr, 1 - 2 qtrs, 2 - 3 qtrs, 3 - 4 qtrs, 4 - 5 qtrs, 5 - 6 qtrs, 6 - 7 qtrs, 7 - 8 qtrs, 8 - 9 qtrs, 9 - 10 or more qtrs
x34	Res in OC AT	0 - 1 qtr, 1 - 2 qtrs, 2 - 3 qtrs, 3 - 4 qtrs, 4 - 5 qtrs, 5 - 6 qtrs, 6 - 7 qtrs, 7 - 8 qtrs, 8 - 9 qtrs, 9 - 10 or more qtrs
x35	ASComp	X - none, 1 - 2-4 cr, 2 - 6-8 cr, 3 - 9-12 cr, 4 - more than 12 cr
	ASSpch	X - none, 6 - 3 cr, 7 - 6 cr, 8 - 5 cr, 9 - 9 or more cr
x36	GC 31A	0 - 100-91, 1 - 90-76, 2 - 75-65, 3 - 64-50, 4 - below 50
	GC 31B	5 - 100-91, 6 - 90-76, 7 - 75-65, 8 - 64-50, 9 - below 50
x37	GC 31C	0 - 100-91, 1 - 90-76, 2 - 75-65, 3 - 64-50, 4 - below 50
	GC 31D	5 - 100-91, 6 - 90-76, 7 - 75-65, 8 - 64-50, 9 - below 50
x38	GC 31E	0 - 100-91, 1 - 90-76, 2 - 75-65, 3 - 64-50, 4 - below 50
	GC 31F	5 - 100-91, 6 - 90-76, 7 - 75-65, 8 - 64-50, 9 - below 50
x39	GC 32A	0 - 95, 1 - 85, 2 - 70, 3 - 50, 4 - 30, 5 - 15, 6 - 5
x40	GC 32B	0 - 95, 1 - 85, 2 - 70, 3 - 50, 4 - 30, 5 - 15, 6 - 5
x41	GC 32C	0 - 95, 1 - 85, 2 - 70, 3 - 50, 4 - 30, 5 - 15, 6 - 5
x42	GC 32D	0 - 95, 1 - 85, 2 - 70, 3 - 50, 4 - 30, 5 - 15, 6 - 5
x43	GC 32E	0 - 95, 1 - 85, 2 - 70, 3 - 50, 4 - 30, 5 - 15, 6 - 5
x44	GC 33A	0 - 95, 1 - 85, 2 - 70, 3 - 50, 4 - 30, 5 - 15, 6 - 5
x45	GC 33B	0 - 95, 1 - 85, 2 - 70, 3 - 50, 4 - 30, 5 - 15, 6 - 5
x46	GC 40A	0 - 100-91, 1 - 90-76, 2 - 75-26, 3 - 25-11, 4 - 10 and below
x47	GC 40B	0 - 100-91, 1 - 90-76, 2 - 75-26, 3 - 25-11, 4 - 10 and below

x48	No. GC lit courses No. hum in GC	0 - 1, 1 - 2, 2 - 3, 3 - 4, 4 - 5 or more 5 - 1, 6 - 2, 7 - 3, 8 - 4, 9 - 5 or more
x49	Prep Engl Engl A	0 - A, 1 - B, 2 - C, 3 - D, 4 - F,Y,Z 5 - A, 6 - B, 7 - C, 8 - D, 9 - F,Y,Z
x50	Engl B Engl C	0 - A, 1 - B, 2 - C, 3 - D, 4 - F,Y,Z 5 - A, 6 - B, 7 - C, 8 - D, 9 - F,Y,Z
x51	Comp 4 Comp 5	0 - A, 1 - B, 2 - C, 3 - D, 4 - F,Y,Z 5 - A, 6 - B, 7 - C, 8 - D, 9 - F,Y,Z
x52	Comp 6 Comp 7f	0 - A, 1 - B, 2 - C, 3 - D, 4 - F,Y,Z 5 - A, 6 - B, 7 - C, 8 - D, 9 - F,Y,Z
x53	Comp 25s Comp 27	0 - A, 1 - B, 2 - C, 3 - D, 4 - F,Y,Z 5 - A, 6 - B, 7 - C, 8 - D, 9 - F,Y,Z
x54	Comp 28 Comp 29	0 - A, 1 - B, 2 - C, 3 - D, 4 - F,Y,Z 5 - A, 6 - B, 7 - C, 8 - D, 9 - F,Y,Z
x55	Comp 30 Comp 65	0 - A, 1 - B, 2 - C, 3 - D, 4 - F,Y,Z 5 - A, 6 - B, 7 - C, 8 - D, 9 - F,Y,Z
x56, x57	CAR	
x58	HS name	0 - Mpls Cent, 1 - South, 2 - North, 3 - Henry, 4 - Edison, 5 - Southwest, 6 - Roose, 7 - Wash, 8 - West, 9 - Marshall
x59	HS name	0 - Mpls Voc, 1 - StP Cent, 2 - Mech Arts, 3 - Murray, 4 - Harding, 5 - Johnson, 6 - Wilson, 7 - Humboldt, 8 - Monroe, 9 - Washington
x60	Comm 1 Comm 2	0 - A, 1 - B, 2 - C, 3 - D, 4 - F,Y,Z 5 - A, 6 - B, 7 - C, 8 - D, 9 - F,Y,Z
x61	Comm 3 Rhet 1	0 - A, 1 - B, 2 - C, 3 - D, 4 - F,Y,Z 5 - A, 6 - B, 7 - C, 8 - D, 9 - F,Y,Z
x62	Rhet 2 Rhet 3	0 - A, 1 - B, 2 - C, 3 - D, 4 - F,Y,Z 5 - A, 6 - B, 7 - C, 8 - D, 9 - F,Y,Z
x63	Rhet 51 Rhet 26s	0 - A, 1 - B, 2 - C, 3 - D, 4 - F,Y,Z 5 - A, 6 - B, 7 - C, 8 - D, 9 - F,Y,Z
x64	Engl 4 Engl 5	0 - A, 1 - B, 2 - C, 3 - D, 4 - F,Y,Z 5 - A, 6 - B, 7 - C, 8 - D, 9 - F,Y,Z
x65	Engl 6 Engl 85	0 - A, 1 - B, 2 - C, 3 - D, 4 - F,Y,Z 5 - A, 6 - B, 7 - C, 8 - D, 9 - F,Y,Z
x66	Engl 86 Journ 11	0 - A, 1 - B, 2 - C, 3 - D, 4 - F,Y,Z 5 - A, 6 - B, 7 - C, 8 - D, 9 - F,Y,Z

x67	Journ 13 Journ 14	0 - A, 1 - B, 2 - C, 3 - D, 4 - F,Y,Z 5 - A, 6 - B, 7 - C, 8 - D, 9 - F,Y,Z
x68	Journ 15 Journ 19	0 - A, 1 - B, 2 - C, 3 - D, 4 - F,Y,Z 5 - A, 6 - B, 7 - C, 8 - D, 9 - F,Y,Z
x69	Spch 1 Spch 2	0 - A, 1 - B, 2 - C, 3 - D, 4 - F,Y,Z 5 - A, 6 - B, 7 - C, 8 - D, 9 - F,Y,Z
x70	Spch 5 Spch 31	0 - A, 1 - B, 2 - C, 3 - D, 4 - F,Y,Z 5 - A, 6 - B, 7 - C, 8 - D, 9 - F,Y,Z
x71	Spch 32 Spch 33	0 - A, 1 - B, 2 - C, 3 - D, 4 - F,Y,Z 5 - A, 6 - B, 7 - C, 8 - D, 9 - F,Y,Z
x72	Phil 1 Phil 2	0 - A, 1 - B, 2 - C, 3 - D, 4 - F,Y,Z 5 - A, 6 - B, 7 - C, 8 - D, 9 - F,Y,Z
x73	Phil 3 JC lit AT	0 - A, 1 - B, 2 - C, 3 - D, 4 - F,Y,Z 5 - 1, 6 - 2, 7 - 3, 8 - 4, 9 - 5 or more
x74	Sr coll lit AT Sr coll spch AT	0 - 1, 1 - 2, 2 - 3, 3 - 4, 4 - 5 or more 5 - 1, 6 - 2, 7 - 3, 8 - 4, 9 - 5 or more
x75	JC hum AT SC hum AT	0 - 1, 1 - 2, 2 - 3, 3 - 4, 4 - 5 or more 5 - 1, 6 - 2, 7 - 3, 8 - 4, 9 - 5 or more
x76	Sr coll phil AT Comp 58	0 - 1, 1 - 2, 2 - 3, 3 - 4, 4 - 5 or more 5 - A, 6 - B, 7 - C, 8 - D, 9 - F,Y,Z
x77, x78	%ile average	
x79	No. qtrs AS	0 - 1, 1 - 2, 2 - 3, 3 - 4, 4 - 5, 5 - 6, 6 - 7, 7 - 8, 8 - 9, 9 - 10+
x80	HS name	0 - St L Pk, 1 - Ed-Morn, 2 - Rob'dale, 3 - Col Hts, 4 - Hopk, 5 - Bloom, 6 - Richfield, 7 - Wayzata, 8 - New Bri'ton, 9 - Wh Bear

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